

August 3, 2005

Mr. John Awujo  
Los Angeles County of Public Works  
Environmental Programs  
900 South Fremont Avenue  
Alhambra, California 91802

Subject: **SITE ASSESSEMENT REPORT FOR  
EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK  
1727 ARTESIA BOULEVARD, MANHATTAN BEACH, CALIFORNIA**

Dear Mr. Awujo:

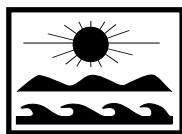
Please find enclosed a copy of the site assessment report dated August 3, 2005, for the above-referenced site. Due to the implementation of Holguin, Fahan & Associates, Inc.'s (HFA's) work plan dated May 7, 2004, this report has been prepared by HFA under the direction of ExxonMobil Oil Corporation.

If you have any questions or require additional information, please contact Mr. James Anderson of HFA at (805) 641-4089 or the undersigned at (310) 212-2904.

Sincerely,

A handwritten signature in black ink, appearing to read "Jenee M. Briggs". The signature is fluid and cursive, with a large, stylized "B" at the end.

Jenee Briggs  
Project Manager  
ExxonMobil Oil Corporation



# HOLGUIN, FAHAN & ASSOCIATES, INC.

ENVIRONMENTAL MANAGEMENT CONSULTANTS

August 3, 2005

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EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK  
1727 ARTESIA BOULEVARD, MANHATTAN BEACH, CALIFORNIA**

Dear Mr. Awujo:

Enclosed, please find Holguin, Fahan & Associates, Inc.'s site assessment report for ExxonMobil Oil Corporation (ExxonMobil) Former Service Station #18-EBK.

Holguin, Fahan & Associates, Inc. trusts that this report meets your requirements.

Sincerely,

James Anderson, REA  
Associate Engineer  
Holguin, Fahan & Associates, Inc.

JDA:bc:mgh:nd

cc: Ms. Jenee Briggs, ExxonMobil  
Park Place Accomodations

**ENVIRONMENTAL SCIENTISTS GEOLOGISTS ENGINEERS**

**Contaminated Site Assessment • Site Remediation • Mobile Remediation • CPT Service • Groundwater Monitoring**

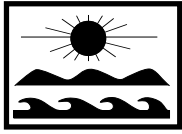
50 West Main Street  
Ventura, California 93001  
805-641-1056

948 North Lemon Street  
Orange, California 92867  
714-210-5971

1003 East Cooley Drive, Suite 201  
Colton, California 92324  
909-422-8988

1215 South Park Lane, Suite 1  
Tempe, Arizona 85281  
480-505-3332

[www.hfa.com](http://www.hfa.com)



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**HOLGUIN, FAHAN & ASSOCIATES, INC.**

ENVIRONMENTAL

MANAGEMENT

CONSULTANTS

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**SITE ASSESSMENT REPORT**

**EXXONMOBIL OIL CORPORATION  
FORMER MOBIL SERVICE STATION #18-EBK  
1727 ARTESIA BOULEVARD  
MANHATTAN BEACH, CALIFORNIA**

**AUGUST 3, 2005**

Client: ExxonMobil Oil Corporation  
3700 West 190th Street, TPT #2  
Torrance, California 90504

Contact: Ms. Jenee Briggs  
(310) 212-2904

Consultant: Holguin, Fahan & Associates, Inc.  
50 West Main Street  
Ventura, California 93001

Project Manager: James Anderson  
(805) 641-4089  
James\_Anderson@hfa.com

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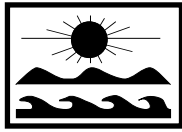
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James Anderson, REA  
Associate Engineer  
Holguin, Fahan & Associates, Inc.

A handwritten signature in cursive script, appearing to read "Mark R. Fahan".

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Mark R. Fahan, RG, REA  
Vice President  
Holguin, Fahan & Associates, Inc.



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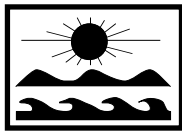
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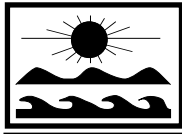


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### LIST OF ACRONYMS

AB2886	California State Assembly Bill 2886
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CCR	California Code of Regulations
CDWR	California Department of Water Resources
CRWQCB-LAR	California Regional Water Quality Control Board, Los Angeles Region (4)
DHS	Department of Health Services
DIPE	diisopropyl ether
DOT	Department of Transportation
EPA	Environmental Protection Agency
ETBE	ethyl tertiary butyl ether
fbg	feet below grade
ID	identification
J	value between the method detection limit and the reporting limit
LACDPW	Los Angeles County Department of Public Works
LUFT	leaking underground fuel tank
mg/kg	milligrams per kilogram
MSL	mean sea level
MTBE	methyl tertiary butyl ether
N/A	not applicable
No.	number
REF	report reference
TAME	tertiary amyl methyl ether
TBA	tertiary butyl alcohol
TPH	total petroleum hydrocarbons
USGS	United States Geological Survey
UST	underground storage tank
µg/l	micrograms per liter



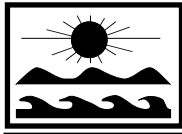
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## **INTRODUCTION**

Holguin, Fahan & Associates, Inc. (HFA) was contracted by ExxonMobil Oil Corporation (ExxonMobil) to perform a site assessment at ExxonMobil Former Service Station #18-EBK, located at 1727 Artesia Boulevard, in the city of Manhattan Beach, California (see Figure 1 - Site Location Map). The assessment was performed to delineate the lateral and vertical extents of subsurface adsorbed-phase hydrocarbons and to determine if groundwater contained dissolved-phase hydrocarbons. The site assessment was conducted in accordance with HFA's work plan for additional site assessment activities dated May 7, 2004. Due to nonresponse from the LACDPW with respect to the work plan, the assessment activities were implemented in accordance with the 60-day policy for continued assessment in CCR Title 23, Chapter 16, Section 2722(E) (see Appendix 1 for the notification letter).

The responsible party contact is Ms. Jenee Briggs, ExxonMobil Oil Corporation, 3700 West 190th Street, TPT #2, Torrance, California, 90504, (310) 212-2904. The environmental consultant contact is Mr. James Anderson, Holguin, Fahan & Associates, Inc., 50 West Main Street, Ventura, California, 93001, (805) 641-4089. The regulatory agency contact is Mr. John Awujo, Los Angeles County Department of Public Works, Environmental Programs, 900 South Fremont Avenue, Alhambra, California, 91802, (626) 458-3517.



## **BACKGROUND**

### **SITE DESCRIPTION**

ExxonMobil Former Service Station #18-EBK is located at 1727 Artesia Boulevard, on the northwestern corner of the intersection of Aviation Boulevard and Artesia Boulevard, in the city of Manhattan Beach, California (see Figure 1). The surrounding areas consist of light commercial and residential properties, and a Shell brand service station is located across the intersection to the southeast (see Figure 2 - Site Vicinity Map). The subject site is a former Mobil brand service station, which was decommissioned in March 2003 with the removal of the underground fueling facilities (HFA, 2003). Current site facilities include three abandoned dispenser islands and a service station building (see Figure 3 - Plot Plan).

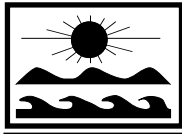
### **SITE HYDROGEOLOGY**

The site is located at an elevation of 110 feet above MSL, and the local topography slopes toward the east (USGS, 1966). The site lies on the western flank of the El Segundo Sand Hills (Older Dune Sand) (CDWR, 1961). Surface waters in the site vicinity drain to the Pacific Ocean (CRWQCB-LAR, 1994). The nearest body of surface water is the Pacific Ocean, located 1.5 miles to the west (USGS, 1966).

Soils in the site vicinity consist of Recent alluvium, which contains the Older Dune Sand to approximately 100 fbg. The alluvium is underlain in descending order by the Bellflower Aquiclude and the Gardena Aquifer of the Lakewood Formation (CDWR, 1961). Assessment activities indicate that the alluvium beneath the site consists of sandy gravel and sand from the surface to 75 fbg, and silty sand from 75 to 90 fbg, the maximum depth investigated (see Appendix 2 for the logs of exploratory borings).

The site is located within the West Coast Groundwater Basin of the Los Angeles-San Gabriel Hydrologic Unit (CRWQCB-LAR, 1994). Based upon historical groundwater monitoring, first groundwater is present at 85 to 90 fbg, and the groundwater flow direction is toward the northeast (Kleinfelder, 1998). First groundwater is interpreted as an unconfined semi-perched groundwater zone within Recent alluvium that is separated from the lower producing aquifers by the Bellflower Aquiclude (CDWR, 1961).

Groundwater within the basin has existing beneficial use for municipal, industrial, and agricultural purposes (CRWQCB-LAR, 1994). Based on information provided by the LACDPW Hydrologic Records Section there are two groundwater production wells within 1 mile of the site. LACDPW well #732C is an active public supply well located 4,500 feet to the east, and LACDPW



well #721K is an inactive municipal supply well located 3,800 feet to the northeast (LACDPW, 2005).

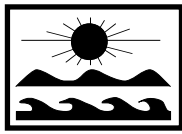
#### **PREVIOUS WORK**

In 1988, the first generation of USTs were removed from the northwestern portion of the site and replaced with the second generation of USTs in the northeastern portion of the site (Alton Geoscience [Alton], 1996).

In March 2002, a baseline environmental assessment was conducted. Five soil borings were drilled around the fueling facilities to a maximum of 50 fbg. Laboratory analytical results for the soil samples indicated only isolated detections of hydrocarbons, at maximum TPH as gasoline and MTBE concentrations of 2.4 and 0.16 mg/kg, respectively. Benzene was not detected in any of the soil samples (see Figure 3, and Table 1 - Summary of Soil Sample Analytical Results) (HFA, 2002).

In March 2003, the service station was decommissioned with the removal of underground fueling facilities. Laboratory analytical results for the compliance soil samples collected from beneath the former fueling facilities indicated TPH as gasoline, benzene, and MTBE concentrations up to 38, 0.17, and 3.9 mg/kg, respectively. A secondary excavation was conducted to 10 fbg beneath the section of product piping that indicated the highest concentrations, and removed 22.5 tons of hydrocarbon-containing soil. Laboratory analytical results for the bottom verification soil samples collected at 10 fbg indicated maximum TPH as gasoline and MTBE concentrations of 4.6 and 31 mg/kg, respectively. Benzene was not detected (see Figure 4 - Adsorbed-Phase Hydrocarbon Concentrations for Compliance Soil Samples and Table 2 - Summary of Compliance Soil Sample Analytical Results) (HFA, 2003).





## **SITE EVALUATION METHODS AND RESULTS**

### **ASSESSMENT STRATEGY**

Due to the detection of MTBE in the soil samples collected during the station abandonment, three soil borings (B-6 through B-8) were drilled on-site. One soil boring (B-6) was drilled to delineate the vertical extent of adsorbed-phase MTBE measured in the verification soil sample (EX-B-1-10) collected from the bottom of the excavation (see Figure 4). Two soil borings (B-7 and B-8) were drilled through the former UST cavity to delineate the lateral and vertical extents of adsorbed-phase MTBE detected in compliance soil samples T2-N-19 and T3-S-19, and to determine if groundwater contained dissolved-phase hydrocarbons (see Figure 3 and Figure 4).

### **PRE-FIELD ACTIVITIES**

A geophysical survey was conducted to identify substructures in the vicinity of the proposed drilling locations. Underground Service Alert of Southern California was notified at least 48 hours prior to conducting the work. The drilling locations were cleared to 8 fbg using an air knife and vacuum rig in accordance with ExxonMobil protocols.

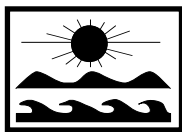
### **SOIL CHARACTERIZATION AND SAMPLING RESULTS**

On May 2, 2005, HFA drilled three soil borings (B-6 through B-8) using a hollow-stem auger rig (see Figure 3 for the boring locations, and Appendix 3 for the procedures). Soil borings B-6 and B-7 were drilled to 55 fbg after field observations indicated that at least 40 feet of clean soil had been encountered, and soil boring B-8 was drilled to 90 fbg, 5 feet into first groundwater.

Soil samples were collected at 5-foot intervals to the total depth of the borings for geologic logging. The subsurface soils encountered during this investigation consisted of sandy gravel and sand from the surface to 75 fbg, and silty sand from 75 to 90 fbg, the maximum depth investigated (see Appendix 2). Groundwater was encountered at 85 fbg in soil boring B-8.

Selected soil samples were collected in accordance with EPA Method 5035 and submitted to a California State certified hazardous material-testing laboratory. The samples were analyzed for TPH as gasoline using the CA-LUFT Method and for BTEX, MTBE, TBA, TAME, DIPE, ETBE, and ethanol using EPA Method 8260B. The analytical data will be electronically reported to the GeoTracker information system in accordance with AB2886 requirements.

Laboratory analytical results for the soil samples collected from soil borings B-6 and B-7 indicated no detections of TPH as gasoline, benzene, or MTBE. Laboratory analytical results for



the soil samples collected from soil boring B-8 indicated a maximum benzene concentration of 0.0247 mg/kg, and no detections of TPH as gasoline or MTBE (see Figure 5 - Adsorbed-Phase Hydrocarbon Concentrations for Soil Borings, Table 1, and Appendix 4 for the laboratory reports).

#### **GROUNDWATER CHARACTERIZATION AND SAMPLING RESULTS**

On May 2, 2005, a grab groundwater sample was collected from the bottom of soil boring B-8 (see Appendix 3). The groundwater sample was submitted to a California State certified hazardous material-testing laboratory, where it was analyzed for TPH as gasoline using EPA Method CA-LUFT and for BTEX, MTBE, TBA, TAME, DIPE, ETBE, and ethanol using EPA Method 8260B. Laboratory analytical results for the groundwater sample collected from soil boring B-8 indicated no detection of TPH as gasoline, benzene, MTBE, or TBA (see Table 3 - Summary of Groundwater Sample Analytical Results).

#### **WASTE MANAGEMENT**

Soil cuttings and decontamination water from the drilling were temporarily stored on-site in 55-gallon DOT-approved drums, pending receipt of laboratory analytical results. The soil and groundwater wastes were transported off-site by Philip Services Corporation (PSC Industrial Outsourcing Group) for recycling at TPS Technologies and Crosby & Overton, respectively (see Appendix 5 for the waste manifests).



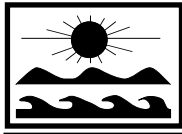
## **SUMMARY AND CONCLUSIONS**

Soils beneath the site consist of Recent alluvium composed of sandy gravel and sand from the surface to 75 fbg, and silty sand from 75 to 90 fbg, the maximum depth investigated. Groundwater was encountered at 85 fbg during the assessment.

A review of sensitive receptors identified one inactive, and one active groundwater production well within 1 mile of the site, both of which are used for municipal supply. The inactive well is located 3,800 feet to the northeast, and the active well is located 4,500 feet to the east, crossgradient of groundwater flow. No bodies of surface water are located within 1 mile of the site.

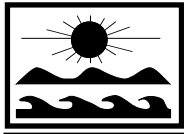
Results of the current assessment indicated a maximum benzene concentration of 0.0247 mg/kg, and no detections of TPH as gasoline or MTBE for any of the samples. The historical assessment activities indicate that MTBE was not measured in any sample collected from greater than 20 fbg. Based upon the results of the assessment, the vertical and lateral extents of subsurface hydrocarbons are defined and localized to the shallow soils directly beneath the former facilities.

Dissolved-phase hydrocarbons were not detected in the groundwater sample collected during the drilling of the soil boring (B-8) advanced through the former USTs at the downgradient edge of the property, which indicates that groundwater beneath the site does not contain dissolved-phase hydrocarbons.



## REFERENCES

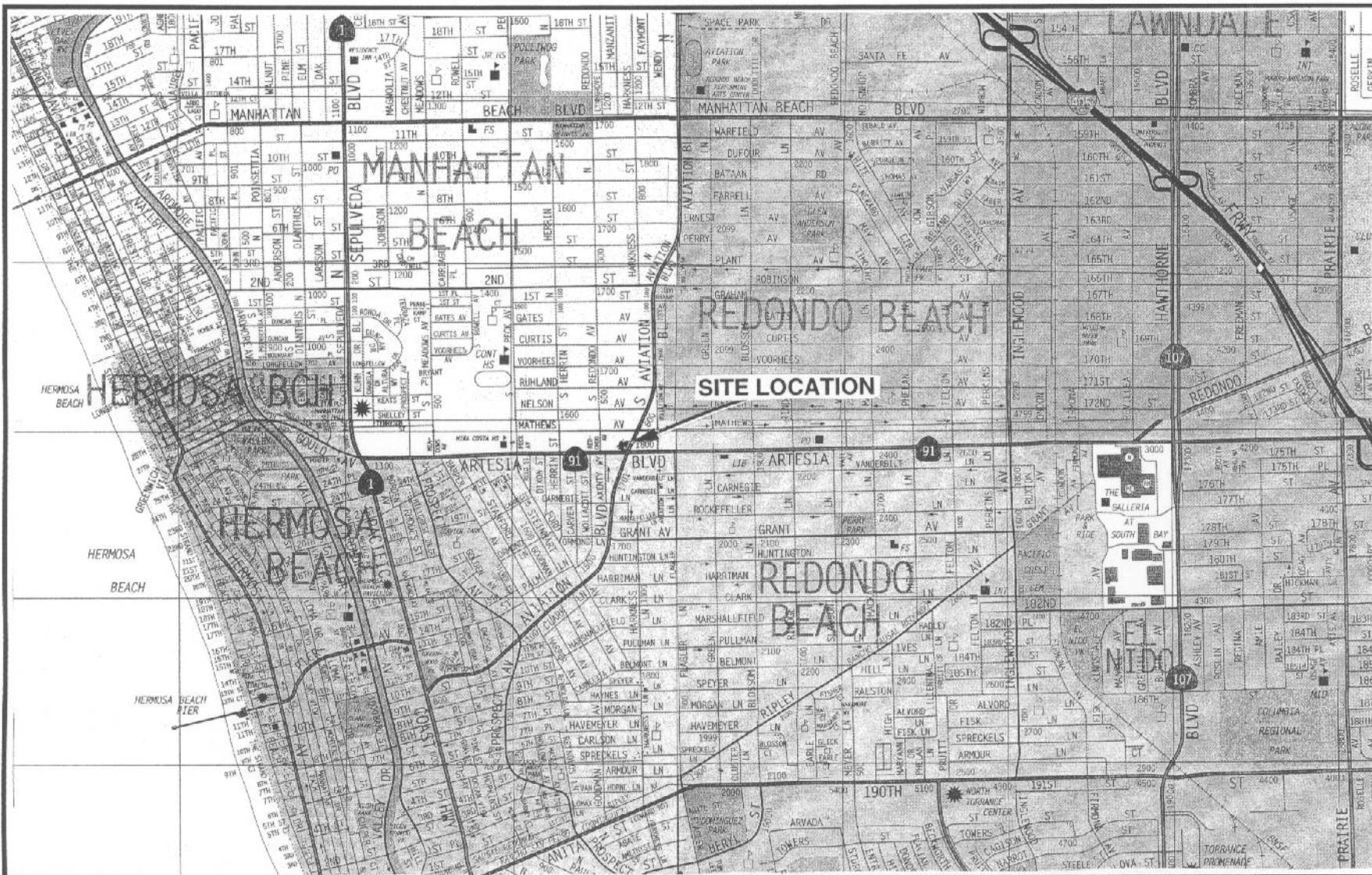
- Alton Geoscience, 1996, Request for Closure for Mobil Station 11-EBK, October 9, 1996.
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- Holguin, Fahan & Associates, Inc., 2003, Tank Excavation Assessment Report for ExxonMobil Oil Corporation Former Service Station #18-EBK, April 29, 2003.
- Kleinfelder, 1998, Second Quarter Progress Report for Mobil Service Station 18-EBK, June 10, 1998.
- Los Angeles County Department of Public Works, 2005, Information Request Transmittal, August 4, 2005.
- United States Geological Survey, 1966, Redondo Beach Quadrangle, 7.5-Minute Series Topographic, photorevised 1981.



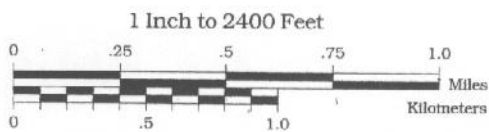
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ASSOCIATES, INC.**

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## FIGURES



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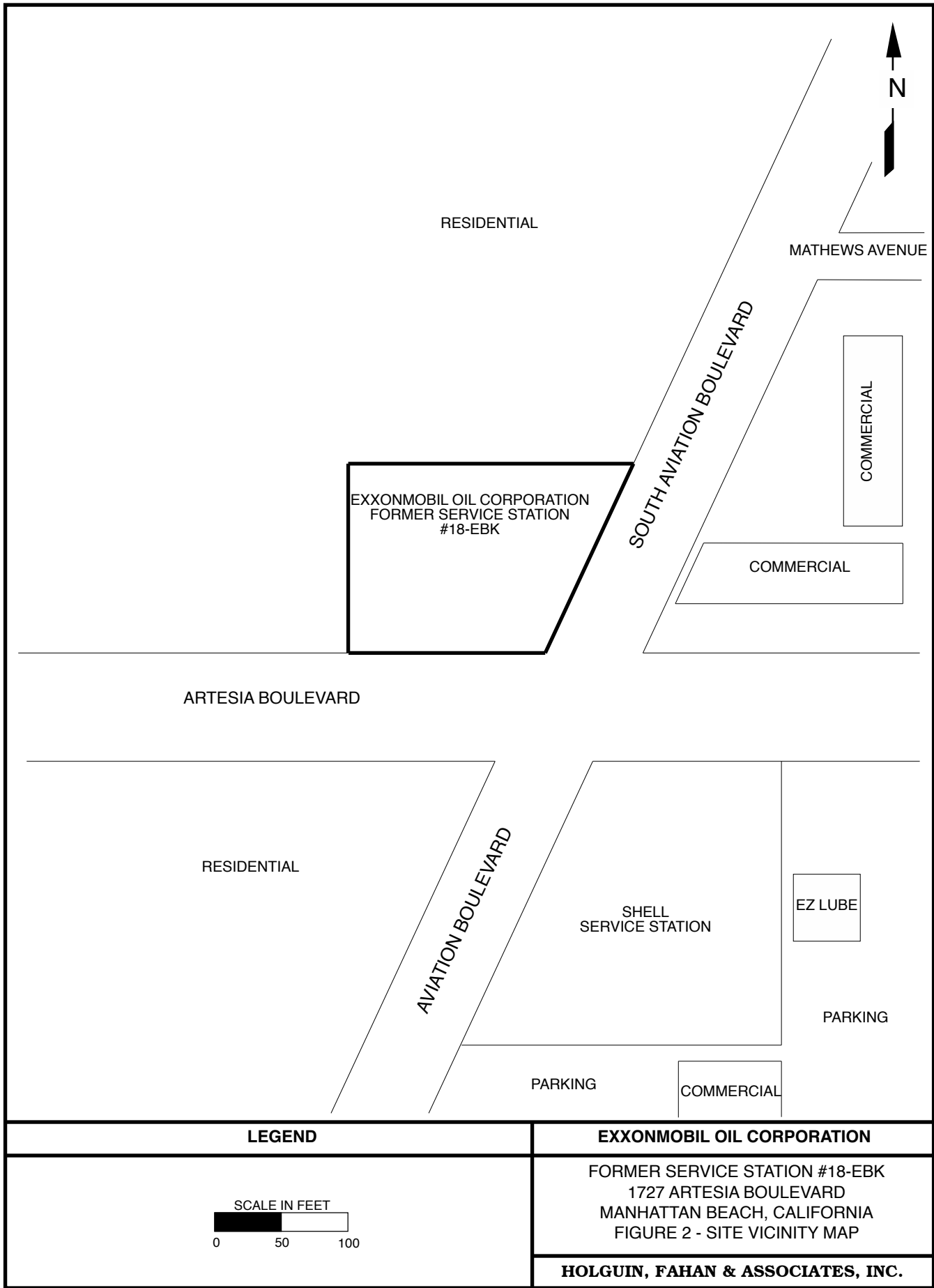


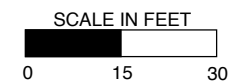
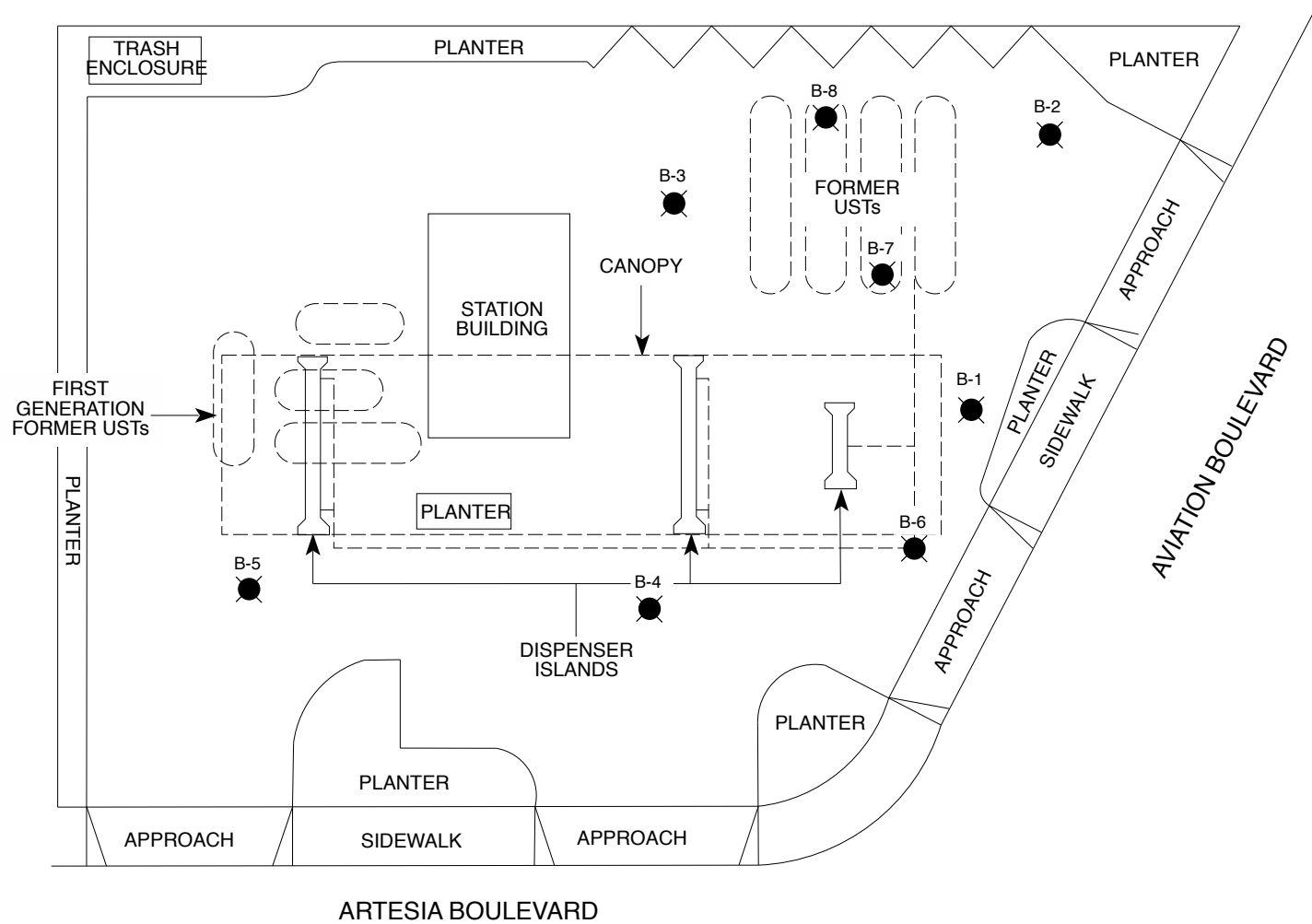
SOURCE: THE THOMAS GUIDE FOR LOS ANGELES COUNTY; 1998 EDITION

# EXXONMOBIL OIL CORPORATION

SERVICE STATION #18-EBK  
1727 ARTESIA BOULEVARD  
MANHATTAN BEACH, CALIFORNIA  
FIGURE 1 - SITE LOCATION MAP

HOLGUIN, FAHAN & ASSOCIATES, INC.





#### LEGEND

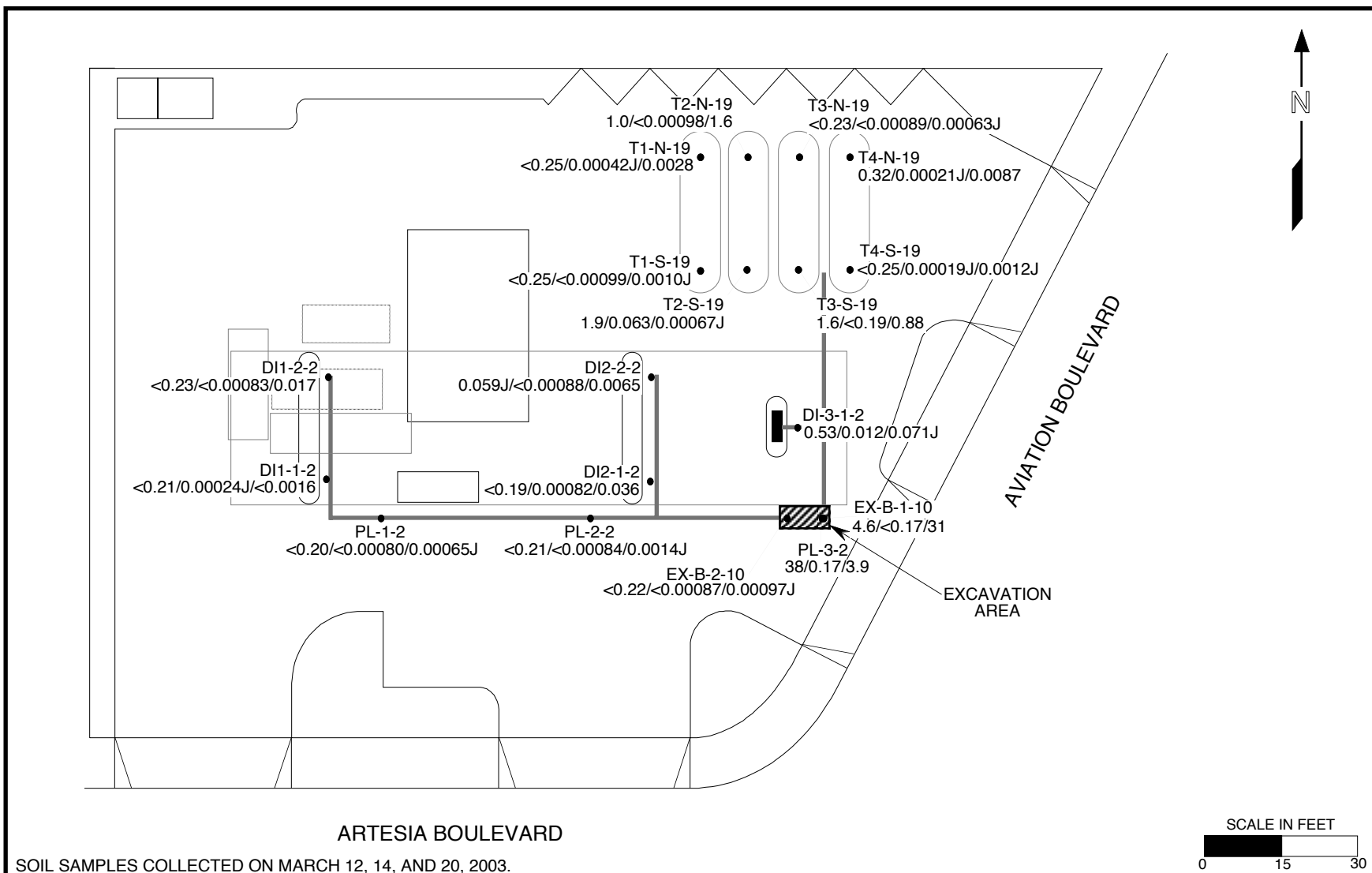
 SOIL BORING

#### EXXONMOBIL OIL CORPORATION

FORMER SERVICE STATION #18-EBK  
 1727 ARTESIA BOULEVARD  
 MANHATTAN BEACH, CALIFORNIA  
 FIGURE 3 - PLOT PLAN

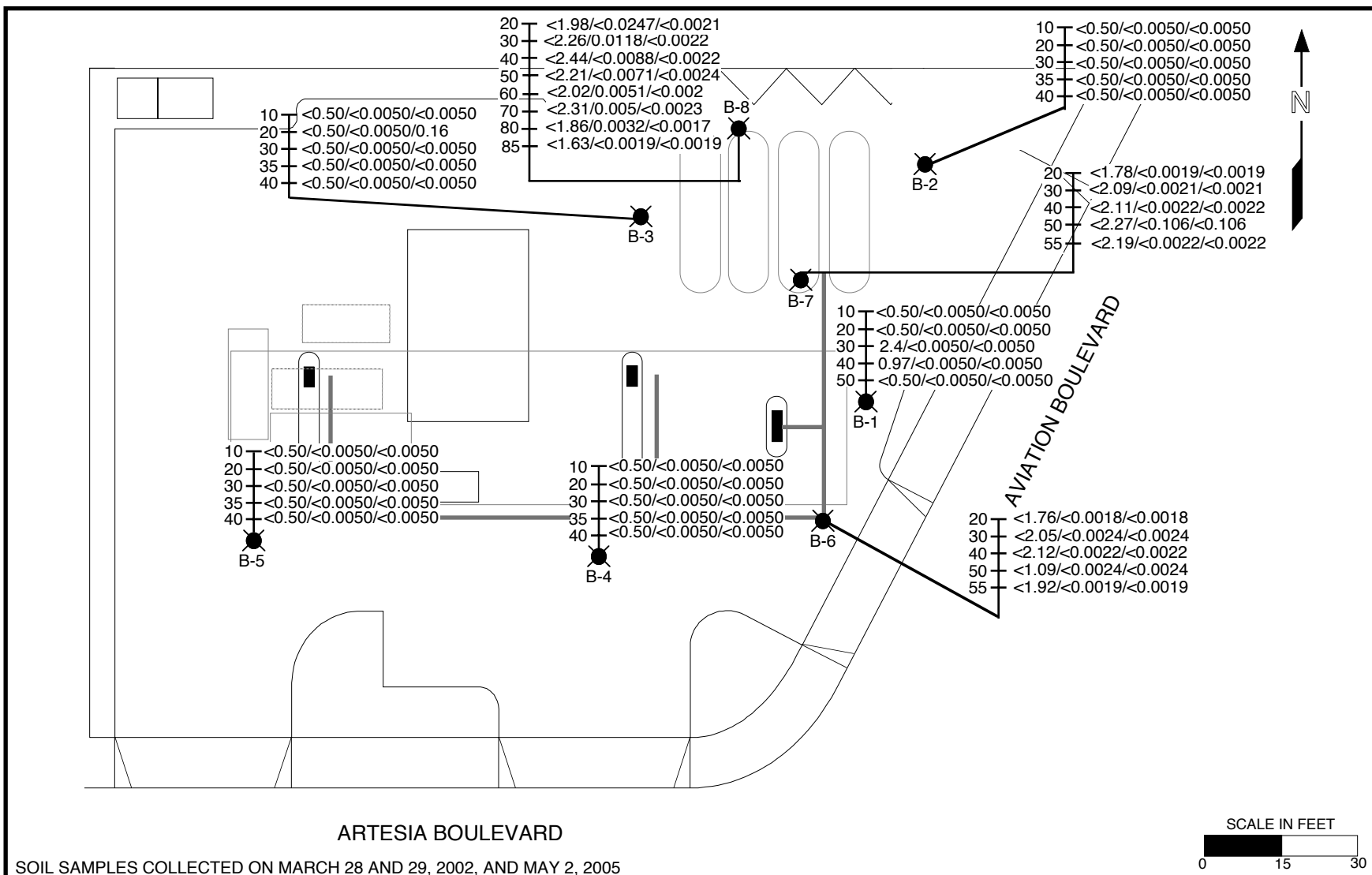
**HOLGUIN, FAHAN & ASSOCIATES, INC.**





LEGEND	EXXONMOBIL OIL CORPORATION
<ul style="list-style-type: none"> <li>• SOIL SAMPLE LOCATION</li> </ul> <p>### TPH AS GASOLINE/BENZENE/MTBE CONCENTRATIONS IN SOIL (mg/kg)</p>	<p>FORMER SERVICE STATION #18-EBK  1727 ARTESIA BOULEVARD  MANHATTAN BEACH, CALIFORNIA  FIGURE 4 - ADSORBED-PHASE HYDROCARBON  CONCENTRATIONS FOR COMPLIANCE SOIL SAMPLES</p> <p><b>HOLGUIN, FAHAN &amp; ASSOCIATES, INC.</b></p>

REVISION DATE: AUGUST 3, 2005: BC



LEGEND		EXXONMOBIL OIL CORPORATION	
SOIL BORING TPH AS GASOLINE/BENZENE/MTBE CONCENTRATIONS IN SOIL (mg/kg) DEPTH OF SOIL SAMPLE (ft)		FORMER SERVICE STATION #18-EBK 1727 ARTESIA BOULEVARD MANHATTAN BEACH, CALIFORNIA FIGURE 5 - ADSORBED-PHASE HYDROCARBON CONCENTRATIONS FOR SOIL BORINGS	
		HOLGUIN, FAHAN & ASSOCIATES, INC.	

REVISION DATE: AUGUST 3, 2005: BC



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## TABLES

**TABLE 1.**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**  
**EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK, MANHATTAN BEACH, CALIFORNIA**

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	LEAD (mg/kg)	REF
EPA ANALYTICAL METHOD				8015 (M)/CA LUFT	8260B									6010B	N/A
B-1	3-28-02	10	B-1-10	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	20	B-1-20	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	30	B-1-30	2.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	1.41	A
	3-28-02	40	B-1-40	0.97	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	50	B-1-50	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
B-2	3-28-02	10	B-2-10	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	20	B-2-20	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	30	B-2-30	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	35	B-2-35	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	40	B-2-40	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	<0.500	A
B-3	3-28-02	10	B-3-10	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	20	B-3-20	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	0.16	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	30	B-3-30	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	35	B-3-35	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-28-02	40	B-3-40	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	<0.500	A
B-4	3-29-02	10	B-4-10	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	20	B-4-20	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	30	B-4-30	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	35	B-4-35	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	40	B-4-40	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	<0.500	A
B-5	3-29-02	10	B-5-10	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	20	B-5-20	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	30	B-5-30	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	35	B-5-35	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	--	A
	3-29-02	40	B-5-40	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	<0.01	<0.01	<0.01	<0.500	A

**TABLE 1.**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**  
**EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK, MANHATTAN BEACH, CALIFORNIA**

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	LEAD (mg/kg)	REF
EPA ANALYTICAL METHOD				8015 (M)/CA LUFT	8260B									6010B	N/A
B-6	5-2-05	20	B-6-20	<1.76	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0440	<0.0018	<0.0018	<0.0018	--	B
	5-2-05	30	B-6-30	<2.05	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0591	<0.0024	<0.0024	<0.0024	--	B
	5-2-05	40	B-6-40	<2.12	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0542	<0.0022	<0.0022	<0.0022	--	B
	5-2-05	50	B-6-50	<1.09	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0594	<0.0024	<0.0024	<0.0024	--	B
	5-2-05	55	B-6-55	<1.92	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0479	<0.0019	<0.0019	<0.0019	--	B
B-7	5-2-05	20	B-7-20	<1.78	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0472	<0.0019	<0.0019	<0.0019	--	B
	5-2-05	30	B-7-30	<2.09	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0532	<0.0021	<0.0021	<0.0021	--	B
	5-2-05	40	B-7-40	<2.11	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0549	<0.0022	<0.0022	<0.0022	--	B
	5-2-05	50	B-7-50	<2.27	<0.106	<0.106	<0.106	<0.106	<0.106	<2.65	<0.106	<0.106	<0.106	--	B
	5-2-05	55	B-7-55	<2.19	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0546	<0.0022	<0.0022	<0.0022	--	B
B-8	5-2-05	20	B-8-20	<1.98	0.0247	<0.0021	<0.0021	<0.0021	<0.0021	<0.0523	<0.0021	<0.0021	<0.0021	--	B
	5-2-05	30	B-8-30	<2.26	0.0118	<0.0022	<0.0022	<0.0022	<0.0022	<0.0549	<0.0022	<0.0022	<0.0022	--	B
	5-2-05	40	B-8-40	<2.44	0.0088	<0.0022	<0.0022	<0.0022	<0.0022	<0.0562	<0.0022	<0.0022	<0.0022	--	B
	5-2-05	50	B-8-50	<2.21	<0.0071	<0.0024	<0.0024	<0.0024	<0.0024	<0.0588	<0.0024	<0.0024	<0.0024	--	B
	5-2-05	60	B-8-60	<2.02	0.0051	0.0008J	<0.002	<0.002	<0.002	<0.0488	<0.002	<0.002	<0.002	--	B
	5-2-05	70	B-8-70	<2.31	0.005	0.001J	<0.0023	<0.0023	<0.0023	<0.058	<0.0023	<0.0023	<0.0023	--	B
	5-2-05	80	B-8-80	<1.86	0.0032	0.0009J	<0.0017	<0.0017	<0.0017	<0.0435	<0.0017	<0.0017	<0.0017	--	B
	5-2-05	85	B-8-85	<1.63	<0.0019	0.001J	<0.0019	<0.0019	<0.0019	<0.0478	<0.0019	<0.0019	<0.0019	--	B

<# = not detected at reporting limit indicated. -- = not analyzed.

A = Holguin, Fahan & Associates, Inc.'s (HFA's) report dated April 24, 2002.

B = HFA's current report.

**TABLE 2.**  
**SUMMARY OF COMPLIANCE SOIL SAMPLE ANALYTICAL RESULTS**  
**EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK, MANHATTAN BEACH, CALIFORNIA**

SAMPLE SOURCE	DATE SAMPLED	DEPTH (ftg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	ETHANOL (mg/kg)	ORGANIC LEAD (mg/kg)	REF
EPA ANALYTICAL METHOD				8015 (M)	8260B										DHS LUFT	N/A
DISPENSER ISLANDS	3-12-03	4	DI1-1-2	<0.21	0.00024J	0.0013	0.00039J	0.0034	<0.0016	0.0079J	<0.00079	<0.00079	<0.00079	0.068J	--	A
	3-12-03	4	DI1-2-2	<0.23	<0.00083	0.00044J	<0.00083	0.00174J	0.017	<0.017	<0.00083	<0.00083	<0.00083	0.03J	--	A
	3-12-03	4	DI2-1-2	<0.19	0.00082	0.0016	<0.00074	0.00168J	0.036	0.0057J	<0.00074	<0.00074	<0.00074	<0.37	--	A
	3-12-03	4	DI2-2-2	0.059J	<0.00088	<0.00088	<0.00088	<0.00088	0.0065	<0.018	<0.00088	<0.00088	<0.00088	0.027J	--	A
	3-12-03	4	DI3-1-2	0.53	0.012	0.11	0.027	0.195	0.071J	0.012J	<0.00070	<0.00070	<0.00070	0.031J	--	A
GASOLINE USTs	3-14-03	19	T1-N-19	<0.25	0.00042J	0.00032J	<0.00088	<0.00088	0.0028	<0.018	<0.00088	<0.00088	<0.00088	0.031J	<1.0	A
	3-14-03	19	T1-S-19	<0.25	<0.00099	<0.00099	<0.00099	<0.00099	0.0010J	0.0085J	<0.00099	<0.00099	<0.00099	<0.5	<1.0	A
	3-14-03	19	T2-N-19	1.0	<0.00098	<0.00098	<0.00098	0.00031J	1.6	0.016J	<0.00098	<0.00098	<0.00098	0.028J	<1.0	A
	3-14-03	19	T2-S-19	1.9	0.063	0.039	<0.00099	0.00102	0.00067J	0.011J	<0.00099	<0.00099	<0.00099	0.028J	<1.0	A
	3-14-03	19	T3-N-19	<0.23	<0.00089	<0.00089	<0.00089	<0.00089	0.00063J	0.0061J	<0.00089	<0.00089	<0.00089	0.027J	<1.0	A
	3-14-03	19	T3-S-19	1.6	<0.19	<0.19	<0.19	<0.19	0.88	73	<0.19	<0.19	<0.19	<93	<1.0	A
	3-14-03	19	T4-N-19	0.32	0.00021J	0.00098	<0.00083	<0.00083	0.0087	0.014J	<0.00083	<0.00083	<0.00083	<0.42	<1.0	A
	3-14-03	19	T4-S-19	<0.25	0.00019J	<0.00091	<0.00091	<0.00091	0.0012J	0.027	<0.00091	<0.00091	<0.00091	0.045J	<1.0	A
PRODUCT LINES	3-12-03	4	PL-1-2	<0.20	<0.00080	<0.00080	<0.00080	<0.00080	0.00065J	<0.016	<0.00080	<0.00080	<0.00080	0.033J	--	A
	3-12-03	4	PL-2-2	<0.21	<0.00084	0.00037J	<0.00084	<0.00084	0.0014J	<0.017	<0.00084	<0.00084	<0.00084	<0.042	--	A
	3-12-03	4	PL-3-2	38	0.17	1.5	0.39	2.85	3.9	<1.4	<0.072	<0.072	<0.072	<36	--	A
EXCAVATION	3-20-03	10	EX-B-1-10	4.6	<0.17	<0.17	<0.17	<0.17	31	<3.4	<0.17	<0.17	<0.17	<85	--	A
	3-20-03	10	EX-B-2-10	<0.22	<0.00087	<0.00087	<0.00087	<0.00087	0.00097J	0.0068J	<0.00087	<0.00087	<0.00087	<0.44	--	A

<# = not detected at reporting limit indicated. -- = not analyzed.

A = Holguin, Fahan & Associates, Inc.'s report dated April 29, 2003.

**TABLE 3.**  
**SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK, MANHATTAN BEACH, CALIFORNIA**

SAMPLE SOURCE	DATE SAMPLED	SAMPLE ID	TPH AS GASOLINE (µg/l)	BENZENE (µg/l)	TOLUENE (µg/l)	ETHYL-BENZENE (µg/l)	TOTAL XYLENES (µg/l)	MTBE (µg/l)	TBA (µg/l)	TAME (µg/l)	DIPE (µg/l)	ETBE (µg/l)	REF
EPA ANALYTICAL METHOD			CA-LUFT	8260B									N/A
B-8	5-2-05	B-8-W	<0.05	<0.0005	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0005	<0.0005	<0.0005	A

<# = not detected at reporting limit indicated.

A = Holguin, Fahan & Associates, Inc.'s current report.

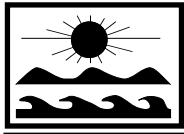


**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

ENVIRONMENTAL MANAGEMENT CONSULTANTS

## APPENDICES



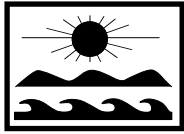


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ASSOCIATES, INC.**

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## **APPENDIX 1.**

### **NOTIFICATION LETTER**



# HOLGUIN, FAHAN & ASSOCIATES, INC.

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ENVIRONMENTAL      MANAGEMENT      CONSULTANTS

April 11, 2005

Mr. John Awujo  
Los Angeles County Department of Public Works  
Environmental Programs  
900 South Fremont Avenue  
Alhambra, California 91802

Subject:      **IMPLEMENTATION OF WORK PLAN FOR ADDITIONAL SITE ASSESSMENT ACTIVITIES  
AT EXXONMOBIL OIL CORPORATION FORMER SERVICE STATION #18-EBK  
1727 ARTESIA BOULEVARD, MANHATTAN BEACH, CALIFORNIA**

Dear Mr. Awujo

Holguin, Fahan & Associates, Inc. (HFA), on behalf of ExxonMobil Oil Corporation (ExxonMobil), submitted a work plan for additional site assessment activities dated May 7, 2004, for the above-referenced site to the Los Angeles County Department of Public Works (LACDPW). The report outlined the proposed methodology for performing additional assessment to delineate the vertical and lateral extent of adsorbed-phase hydrocarbons measured during the tank removal conducted in 2003.

As of the date of this letter, the LACDPW has not issued a written response to the work plan. Therefore, HFA hereby notifies the LACDPW of its intent to invoke the "60-day policy" under Title 23, Chapter 16, Section 2726 of the California Underground Storage Tank Regulations, and implement the proposed work on April 25, 2005, in accordance with the following schedule if a written response is not received by April 22, 2005.

## PROPOSED WORK PLAN IMPLEMENTATION SCHEDULE

MONTHS	ACTIVITY
0	Implement field work
1	Complete field work
3	Submit site assessment report approximately 8 weeks after completion of field work

**ENVIRONMENTAL:   SCIENTISTS   •   GEOLOGISTS   •   ENGINEERS**  
**Contaminated Site Assessment • Site Remediation • Mobile Remediation • CPT Service • Groundwater Monitoring**

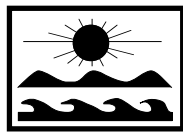
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Ventura, California 93001  
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Martin\_Minter@hfa.com



**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Mr. John Awujo  
LACDPW  
April 11, 2005 - Page 2

Holguin, Fahan & Associates, Inc. trusts that this notification meets your requirements. If you have any questions or require additional information, please contact me at (805) 585-6371 or [James\\_Anderson@hfa.com](mailto:James_Anderson@hfa.com).

Respectfully submitted,

James Anderson, REA  
Associate Engineer  
Holguin, Fahan & Associates, Inc.

JDA:jpk

cc: Ms. Jenee Briggs, ExxonMobil



**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

ENVIRONMENTAL MANAGEMENT CONSULTANTS




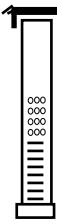
## **APPENDIX 2.**






### **LOGS OF EXPLORATORY BORINGS**

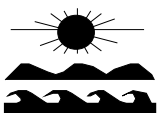
# LITHOLOGY (UNIFIED SOIL CLASSIFICATION SYSTEM)

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS LARGER THAN No. 200 SIEVE	GRAVEL MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE-GRAINED SOILS MORE THAN HALF IS SMALLER THAN No. 200 SIEVE	SILT AND CLAY		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILT AND CLAY		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOIL			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

## SYMBOLS AND ACRONYMS

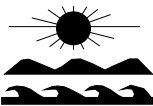
-  SOIL SAMPLE COLLECTED
-  SOIL SAMPLE NOT RECOVERED
-  GROUNDWATER ENCOUNTERED DURING DRILLING
-  WELL BOX WITH LOCKING CAP
-  BLANK SCHEDULE 40 PVC CASING
-  MICROPOROUS BUBBLER
-  SLOTTED SCHEDULE 40 PVC CASING
-  BOTTOM PLUG

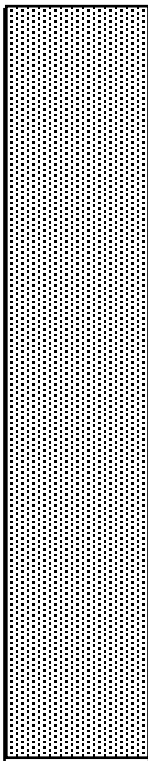
-  ASPHALT
-  CONCRETE
-  BENTONITE/CEMENT GROUT
-  BENTONITE CHIPS OR PELLETS
-  FILTER SAND PACK
- PID = PHOTOIONIZATION DETECTOR
- ppmv = PARTS PER MILLION BY VOLUME
- USCS = UNIFIED SOIL CLASSIFICATION SYSTEM
- fbg = FEET BELOW GRADE
- OD = OUTSIDE DIAMETER



**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

## KEY TO LOG OF EXPLORATORY BORING

SAMPLE		CLIENT: ExxonMobil Oil Corporation		BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL			
INTERVAL	DEPTH (ftg)	PROJECT: Former Service Station #18-EBK					<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	CASING: --	SLOT SIZE: --	FILTER PACK: --
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California								
		DESCRIPTION AND SOIL CLASSIFICATION								
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain										
	0	asphalt 5"		--	--	--				
	5	SILTY SAND: 0/90/10, well graded, fine to medium grained, poorly graded, brown, slightly moist, no odor, no stain		--	NA	SM				
	10	SAND: 0/100/0, fine to medium grained, poorly graded, brown, moderately moist, no odor, no stain		7,9,12	NA	SP				
	15			12,14,17	NA					
	20	light brown, very moist		28, 50/6"	NA					
	25			15,18,25	NA					
	30	fine to coarse grained		30,50	NA					
	35									
DRILLING METHOD: CME- 75 10" hollow-stem auger				DATE DRILLED: May 2, 2005						
SAMPLER TYPE: 2" California-modified split spoon				LOGGED BY: T. Shook						
TOTAL BORING DEPTH: 55 ftg				APPROVED BY: Mark Fahan, RG #4279						
DEPTH TO WATER: ~ 85 ftg				DRILLED BY: Cascade Drilling, Inc.						
 <b>HOLGUIN, FAHAN &amp; ASSOCIATES, INC.</b>		<b>LOG OF EXPLORATORY BORING</b>				<b>B-6</b> Page 1 of 2				

SAMPLE		CLIENT: ExxonMobil Oil Corporation	BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL	
INTERVAL	DEPTH (ftg)	PROJECT: Former Service Station #18-EBK				<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California					
		DESCRIPTION AND SOIL CLASSIFICATION					
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain				CASING: --			
				SLOT SIZE: --			
				FILTER PACK: --			
	35	fine grained, poorly graded	18,21,27	NA	SP		
	40		17,17,20	NA			
	45		18,50/6"	NA			
	50		31,50/6"	NA			
	55		27,50/6"	NA			
	60						
	65						
	70						

DRILLING METHOD: CME- 75 10" hollow-stem auger

DATE DRILLED: May 2, 2005

SAMPLER TYPE: 2" California-modified split spoon

LOGGED BY: T. Shook

TOTAL BORING DEPTH: 55 ftg

APPROVED BY: Mark Fahan, RG #4279

DEPTH TO WATER: ~ 85 ftg

DRILLED BY: Cascade Drilling, Inc.



**HOLGUIN,  
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## LOG OF EXPLORATORY BORING

**B-6**

Page 2 of 2

SAMPLE		CLIENT: ExxonMobil Oil Corporation	BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL	
INTERVAL	DEPTH (ftg)	PROJECT: Former Service Station #18-EBK				<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	CASING: --
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California					SLOT SIZE: --
		DESCRIPTION AND SOIL CLASSIFICATION					FILTER PACK: --
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain							
	0	asphalt 4"	--	--	--		
	5	SAND: 0/100/0, fine to coarse grained, poorly graded, brown, slightly moist, no odor, no stain	--	--	SP		
	10	SANDY GRAVEL: 85/15/0, subangular gravel up to 1/2" in diameter, fine to coarse grained sand, poorly graded, brown, moderately moist, no odor, no stain	9,10,11	NA	GP		
	15		18,20,21	NA			
	20	SAND: 0/100/0, fine to coarse grained, well graded, brown, very moist, no odor, no stain	15,18,22	NA	SW		
	25		18,27,25	NA			
	30	moderately moist	27,50	NA			
	35						
DRILLING METHOD: CME- 75 10" hollow-stem auger			DATE DRILLED: May 2, 2005				
SAMPLER TYPE: 2" California-modified split spoon			LOGGED BY: T. Shook				
TOTAL BORING DEPTH: 55 ftg			APPROVED BY: Mark Fahan, RG #4279				
DEPTH TO WATER: ~ 85 ftg			DRILLED BY: Cascade Drilling, Inc.				

0

5

10

15

20

25

30

35



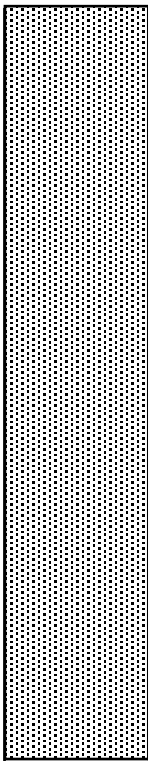
**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

## LOG OF EXPLORATORY BORING

**B-7**

Page 1 of 2



SAMPLE		CLIENT: ExxonMobil Oil Corporation	BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL	
INTERVAL	DEPTH (fbg)	PROJECT: Former Service Station #18-EBK				<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	CASING: -- SLOT SIZE: -- FILTER PACK: --
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California					
		DESCRIPTION AND SOIL CLASSIFICATION					
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain							
	35	SAND: 0/100/0, fine grained, poorly graded, light brown, moderately moist, no odor, no stain	30,50	NA	SP		
	40		21,25,29	NA			
	45		18,33,36	NA			
	50		32,50	NA			
	55		27,50	NA			
	60						
	65						
	70						

DRILLING METHOD: CME- 75 10" hollow-stem auger

DATE DRILLED: May 2, 2005

SAMPLER TYPE: 2" California-modified split spoon

LOGGED BY: T. Shook

TOTAL BORING DEPTH: 55 fbg

APPROVED BY: Mark Fahan, RG #4279

DEPTH TO WATER: ~ 85 fbg

DRILLED BY: Cascade Drilling, Inc.

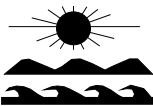


**HOLGUIN,  
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ASSOCIATES, INC.**

## LOG OF EXPLORATORY BORING


**B-7**

Page 2 of 2

SAMPLE		CLIENT: ExxonMobil Oil Corporation		BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL			
INTERVAL	DEPTH (ftg)	PROJECT: Former Service Station #18-EBK					<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	CASING: --	SLOT SIZE: --	FILTER PACK: --
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California								
		DESCRIPTION AND SOIL CLASSIFICATION								
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain										
	0	asphalt 4"		--	--	CL				
	5	SAND: 0/100/0, fine to coarse grained, poorly graded, brown, slightly moist, no odor, no stain		--	NA	SP				
	10	SANDY GRAVEL: 90/10/0, subangular gravel up to 3/8" in diameter, poorly graded, brown, moderately moist, no odor, no stain		6,7,11	NA	GP				
	15	70/30/0		12,15,19	NA					
	20	SAND: 0/100/0, fine to medium grained, poorly graded, brown, very moist, no odor, no stain		15,19,22	NA	SP				
	25	light brown		28,50	NA					
	30	moderately moist		20,24,29	NA					
	35									
DRILLING METHOD: CME- 75 10" hollow-stem auger				DATE DRILLED: May 2, 2005						
SAMPLER TYPE: 2" California-modified split spoon				LOGGED BY: T. Shook						
TOTAL BORING DEPTH: 90 ftg				APPROVED BY: Mark Fahan, RG #4279						
DEPTH TO WATER: ~ 85 ftg				DRILLED BY: Cascade Drilling, Inc.						
 <b>HOLGUIN, FAHAN &amp; ASSOCIATES, INC.</b>		<b>LOG OF EXPLORATORY BORING</b>				<b>B-8</b> Page 1 of 3				

SAMPLE		CLIENT: ExxonMobil Oil Corporation	BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL	
INTERVAL	DEPTH (ftg)	PROJECT: Former Service Station #18-EBK				<input type="checkbox"/> GROUNDWATER WELL <input type="checkbox"/> VADOSE WELL <input type="checkbox"/> SPARGE WELL <input checked="" type="checkbox"/> BORING	
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California				CASING: --	
		DESCRIPTION AND SOIL CLASSIFICATION				SLOT SIZE: --	
NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain		FILTER PACK: --					
	35	SAND: 0/100/0, fine grained, poorly graded, light brown, slightly moist, no odor, no stain	30,50	NA	SP		35
	40		35,50	NA			40
	45		17,20,28	NA			45
	50		21,23,29	NA			50
	55		32,50	NA			55
	60		18,36,50	NA			60
	65		23,50	NA			65
	70						70
DRILLING METHOD: CME- 75 10" hollow-stem auger			DATE DRILLED: May 2, 2005				
SAMPLER TYPE: 2" California-modified split spoon			LOGGED BY: T. Shook				
TOTAL BORING DEPTH: 90 ftg			APPROVED BY: Mark Fahan, RG #4279				
DEPTH TO WATER: ~ 85 ftg			DRILLED BY: Cascade Drilling, Inc.				
<b>HOLGUIN, FAHAN &amp; ASSOCIATES, INC.</b>		<b>LOG OF EXPLORATORY BORING</b>			<b>B-8</b> Page 2 of 3		
REVISION DATE: JULY 19, 2005: BC							

SAMPLE		CLIENT: ExxonMobil Oil Corporation		BLOWS PER 6 INCHES	PID (ppmv)	USCS	COMPLETION DETAIL	
INTERVAL	DEPTH (fbg)	PROJECT: Former Service Station #18-EBK					<input type="checkbox"/> GROUNDWATER WELL	<input type="checkbox"/> VADOSE WELL
		LOCATION: 1727 Artesia Boulevard, Manhattan Beach, California					<input type="checkbox"/> SPARGE WELL	<input checked="" type="checkbox"/> BORING
		DESCRIPTION AND SOIL CLASSIFICATION					CASING:	SLOT SIZE:
		NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain					FILTER PACK:	
	70			17,23,27	NA	SP		
	75			19,19,24	NA			
	80	SILTY SAND: 0/90/10, fine grained poorly graded, brown, very moist, no odor, no stain  wet		18,19,21	NA			
	85			20,21,24	NA			
	90			21,21,23	NA			
DRILLING METHOD: CME- 75 10" hollow-stem auger				DATE DRILLED: May 2, 2005				
SAMPLER TYPE: 2" California-modified split spoon				LOGGED BY: T. Shook				
TOTAL BORING DEPTH: 90 fbg				APPROVED BY: Mark Fahan, RG #4279				
DEPTH TO WATER: ~ 85 fbg				DRILLED BY: Cascade Drilling, Inc.				

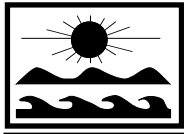


**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

## LOG OF EXPLORATORY BORING

**B-8**

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**HOLGUIN,  
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ENVIRONMENTAL MANAGEMENT CONSULTANTS

### **APPENDIX 3.**

#### **SOIL BORING, DIRECT-PUSH SAMPLING, AND WELL CONSTRUCTION PROCEDURES**

## **SOIL BORING, DIRECT-PUSH SAMPLING, AND WELL CONSTRUCTION PROCEDURES**

### **PRE-DRILLING PROTOCOL**

#### **Planning**

Prior to the start of drilling, necessary permits, site access agreements, and/or encroachment permits are obtained. As-built drawings are obtained if possible. At least 2 weeks in advance of drilling, notifications are made to the property owner, client representative, on-site facility manager, regulatory agency, and/or other appropriate parties. At least 48 hours prior to drilling, Underground Service Alert of Southern California, Arizona Blue Stake, or an equivalent utility locating service is notified. A geophysical survey may be conducted to locate subsurface utilities. Site plans and/or as-built drawings are compared to actual conditions observed at the site. The property owner/retailer is interviewed to gain information about locations of former UST systems (including dispensers, product lines, and vent lines). A visual inspection is made of the locations of the existing UST system, and scars and patches in pavement are noted. The critical zone, which is defined as 10 feet from any part of the UST system as well as the area between the dispensers and USTs, is identified, and any proposed drilling locations within the critical zone may be subject to special hole clearance techniques. Drilling locations within the critical zone are avoided if possible.

A site-specific, worker health and safety plan, including a JSA and traffic control plan for all soil sampling locations for the site, is available at all times during drilling activities. Prior to commencing field activities, a health and safety meeting is held among all on-site personnel involved in the operations, including subcontractors and visitors, and is documented with a health and safety meeting sign-in form. The emergency shut-off switch for the service station is located prior to the start of the drilling activities. A fire extinguisher and "No Smoking" signs (and Proposition 65 signs in California) are present at the site prior to the start of the drilling activities.

In order to determine the natural subsurface conditions, better recognize fill conditions, and prevent cross contamination, the first sampling location is generally located the furthest from any suspected underground improvement.

When drilling a soil boring in asphalt or concrete, a minimum 10-inch round cut is made. When advancing a direct-push location, a minimum 3.5-inch round cut is made.

### **Hole Clearance**

The minimum hole clearance depths are 5 feet below grade (fbg) outside the critical zone and 8 fbg within the critical zone and are conducted as follows:

- 0 to 5 fbg: The area to be cleared exceeds the diameter of the largest tool to be advanced and is large enough to allow for visual inspection of any obstructions encountered. The first 1 to 2 feet of soil or fill is removed by hand digging, then the borehole is probed using a blunt-tipped tool to ensure that no obstructions exist anywhere near the potential path of the drill auger or push-type sampler. Probing is extended laterally as far as possible. Hand augering or post-hole digging then proceeds, but only to the depth that has been probed. If subsurface characteristics prohibit effective probing, a hand auger is carefully advanced past the point of probing. In this case, sufficient hand augering or post-hole digging is performed to remove all the soil in the area to be delineated. For soil borings located outside of the critical zone, an attempt should be made to probe an additional 3 feet.
- 5 to 8 fbg: For the soil borings located inside the critical zone, probing and handclearing an additional 3 feet is performed. If probing is met with refusal, then trained personnel advance a hand auger without excessive force.

Alternate or additional subsurface clearance procedures may also be employed, as required by clients, permit conditions, and/or anticipated subsurface conditions (for example, near major utility corridors or in hard soils). Alternate clearance techniques may include performing a geophysical investigation or using an air knife or water knife. If subsurface conditions prevent adequate subsurface clearance, the field activities cease until the client gives written approval of a procedure for continuation.

When pea gravel, fill sand, or other non-indigenous material is encountered, the sampling location is abandoned unless the absence of subsurface facilities can be demonstrated and client approval to proceed is obtained. If hole clearance activities are conducted prior to the actual day of drilling, the holes are covered with plates and/or backfilled.

If any portion of the UST system is encountered, or if there is any possibility that it has been encountered, the work ceases, and the client is notified immediately. If there is reason to believe that the product system has been damaged, the emergency shut-off switch is activated. The client will decide if additional uncovering by hand is required. If it is confirmed that the UST system has been encountered, tightness tests are performed as required by the client. The hole is backfilled only with client approval.

## **SOIL SAMPLING PROCEDURES**

Soil samples are collected using one of the following methods:

- Manual drilling: Manual drilling utilizes a hand auger. Soil samples are collected with a drive sampler outfitted with steel or brass sleeves. The specific equipment used is noted on a log of exploratory boring.
- Truck-mounted, powered drilling: Truck-mounted, powered drilling utilizes hollow-stem flight auger drilling, air rotary drilling, percussion hammer drilling, or similar technologies. Soil samples are collected in steel or brass sleeves with a California-modified, split-spoon sampler or, for specific projects, a continuous sampler. The specific equipment used is noted on a log of exploratory boring.
- Direct push sampling: Direct push sampling utilizes Geoprobos, cone penetrometer testing rigs, or similar technologies. Soil samples are collected with a drive sampler outfitted with steel, acetate or brass sleeves. The specific equipment used is noted on a log of soil sample descriptions.

Before each soil sampling episode, the sampling equipment is decontaminated using a non-phosphate soap and water wash, and two tap-water rinses. The drill augers or direct-push rods are decontaminated with a steam cleaner between each soil boring (truck-mounted rigs).

Soil samples that are collected in sample sleeves are covered with aluminum foil or Teflon tape followed by plastic caps. If EPA Method 5035 is required, then 5 to 20 grams of soil is extracted from the sample and placed in methanol-preserved containers supplied by the laboratory, or subsamples are collected using Encore samplers. During the sampling process, soil samples and cuttings are field screened for VOCs using a photoionization detector calibrated to an isobutylene or hexane standard. The calibration information is recorded on an equipment calibration log. Any soil staining or discoloration is visually identified. Soils are classified according to the Unified Soil Classification System. Specific geologic and hydrogeologic information collected includes grading, plasticity, density, stiffness, mineral composition, moisture content, soil structure, grain size, degree of rounding, and other features that could affect contaminant transport. All data are recorded on a soil boring log under the supervision of a geologist registered in the state in which the site is located. The samples are labeled, sealed, recorded on a chain-of-custody record, and chilled to 4°C in accordance with the procedures outlined in the California State Water Resources Control Board's Leaking Underground Fuel Tank Field Manual or the Arizona Department of Environmental Quality's (ADEQ's) Leaking Underground Storage Tank Site Characterization Manual. Sample preservation, handling, and transportation procedures are consistent with Holguin, Fahan & Associates, Inc.'s quality assurance/quality control procedures. The samples are transported in a chilled container to a state-certified, hazardous waste testing laboratory.



Cuttings from the soil borings are stored in 55-gallon, Department of Transportation (DOT) approved drums, roll-off bins, or other appropriate containers, as approved by the client. Each container is labeled as waste material or non-hazardous waste, with the number of the soil boring(s) from which the waste was derived, the date the waste was generated, the generator name, and other pertinent information. The drums are stored at the site of generation, or at another location approved by the client until sample laboratory analytical results are obtained, at which time the soil is disposed of appropriately.

A soil boring log is completed for each soil sampling location and includes the following minimum information:

- date of drilling;
- project name and location;
- soil sample names and depths;
- soil descriptions and classifications;
- standard penetration counts (rigs);
- photoionization detector readings;
- drilling equipment;
- soil boring diameter;
- sampling equipment;
- depth to groundwater in soil boring;
- name of person performing logging;
- name of supervising registered geologist; and
- name of drilling company (rigs and direct push).

#### **HYDROPUNCH GROUNDWATER SAMPLING PROCEDURES**

Hydropunch sampling of groundwater is designed for collecting discrete, one-time samples of groundwater for analysis during the drilling or direct-push operations. The Hydropunch sampler consists of a 5-foot long, 1.5-inch diameter screen sheathed by a 2-inch diameter, steel barrel. A disposable point is connected to the bottom of the screen. The Hydropunch assembly is lowered through the hollow-stem auger and driven into the undisturbed soils below the base of the hole, or is pushed into the soil using a direct push rig. The outer sheath is then retracted to expose the screen. A bailer is then lowered into the Hydropunch assembly and retrieves a sample of the groundwater within the assembly.

The extracted groundwater is collected in chilled, 40-milliliter, volatile organic analysis vials having Teflon-lined caps, or other appropriate containers as required by the respective analytical method. For organic compound analyses, hydrochloric acid preservative is added to all containers by the laboratory to lower sample pH. Samples are held at 4°C while in the field

and in transit to the laboratory. Analysis is performed by a state-certified, hazardous waste testing laboratory.

Documentation requirements include:

- sample identification number;
- borehole identification number;
- time and date of sample collection;
- depth at which Hydropunch sample was collected;
- name of person collecting sample;
- number and types of sample containers; and
- type of preservative used, if any.

## **BOREHOLE COMPLETION PROCEDURES**

All sampling locations are either properly abandoned or completed as a well.

### **Abandonment**

Each borehole/sample location that is not completed as a well is backfilled with bentonite grout, neat cement, concrete, or bentonite chips with a permeability less than that of the surrounding soils, and/or soil cuttings, depending on local regulatory requirements or client instructions. Grout is placed by the tremie method. Backfilling is performed carefully to avoid bridging. The type of backfill material is noted on the log.

### **Well Installation**

Wells are designed according to applicable state and local regulations as well as project needs. Details of the well design and construction are recorded on the log and include the following minimum information (in addition to the items noted above for soil borings):

- detailed drawing of well;
- type of well (groundwater, vadose, or air sparging);
- casing diameter and material;
- screen slot size;
- well depth and screen length ( $\pm 1$  foot);
- filter pack material, size, and placement depths;
- annular seal material and placement depths; and
- surface seal design/construction.

Groundwater monitoring wells are generally designed with 30 feet of slotted casing that crosses the water table, unless site conditions, project needs, or local regulations dictate a different well design. Vadose wells are designed with slotted casing appropriate for the project needs, e.g.

slotted in hydrocarbon-containing intervals for vapor extraction. Air sparging wells are typically designed with 5 feet of slotted casing placed 15 feet below the water table. The sand pack is placed at least two feet above the top of the screen, and at least 3 feet of low permeability seal material is placed between the sand pack and the surface seal, unless shallow groundwater conditions exist (less than 5 fbg). The sand pack and low permeability seal material are placed in the annular space from the bottom up using the tremie method.

When drilling in asphalt, a 24-inch round cut is made for the well pad. When drilling on concrete, a 2 x 2-foot square or 24-inch circle is sawcut. The well cover is traffic-rated and has a white lid with a black triangle painted on it (3 inches per side) or a black lid with a white triangle (3 inches per side). The well pad is completed using concrete of a color matching the existing surface. The well number is labeled on the outside of the well box/pad and the inside of the well box. The number on the outside is painted on with a stencil, stamped, or attached to the well with a metal plate. The number on the inside is written on the well cap with waterproof ink. The casing has a notch or indication on its north side indicating a unique measuring/surveying point. Well casings are capped with a locking or slip well cap.

### **Well Development**

Well development is conducted by the use of surge blocks, bailers, pumps, or other appropriate methods in accordance with the requirements of the California Department of Water Resources Bulletin #74-81 dated December 1981, or ASTM International 4448-85a (as required by the ADEQ). Only formation water is used for surging the well. Well development continues until non-turbid groundwater is produced or turbidity stabilizes. The method of development and the volume of groundwater produced is recorded in the field log. All purged groundwater is held on-site, or at another location approved by the client, in sealed, 55-gallon DOT approved drums or other appropriate containers pending transport to an approved recycling facility.

### **Well Elevation Survey**

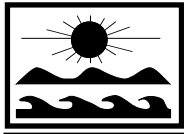
The elevation of the north side of the top of well casing (or other appropriate reference point from which the depth to groundwater can be measured) is surveyed to an accuracy of  $\pm 0.01$  foot. All measurements are reproduced to assure validity. Surveying may be performed by a state-licensed surveyor if required by state or local regulations. In the state of California, wells are surveyed in accordance with AB2886.

## **DATA REDUCTION**

The data compiled from the soil borings are summarized and analyzed. A narrative summary of the soil characteristics is also presented. The logs are checked for the following information:

- correlation of stratigraphic units among sampling locations;
- identification of zones of potentially high hydraulic conductivity;
- identification of the confining layer;
- indication of unusual/unpredicted geologic features (fault zones, fracture traces, facies changes, solution channels, buried stream deposits, cross-cutting structures, pinchout zones, etc.); and
- continuity of petrographic features such as sorting, grain-size distribution, cementation, etc.

Soil boring/well locations are plotted on a properly scaled map. If appropriate, soil stratigraphy of the site is presented in a scaled cross section. Specific features that may impact contaminant migration, e.g., fault zones or impermeable layers, are discussed in narrative form and supplemented with graphical presentations as deemed appropriate.



**HOLGUIN,  
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ENVIRONMENTAL MANAGEMENT CONSULTANTS

#### **APPENDIX 4.**

#### **LABORATORY REPORTS**

## Nashville Division

### COOLER RECEIPT FORM

BC#



Client Name : HEA

Cooler Received/Opened On: 5/06/05 Accessioned By: Shawn Gracey

[Signature]  
Log-in Personnel Signature

1. Temperature of Cooler when triaged: 2.0 Degrees Celsius

2. Were custody seals on outside of cooler?..... YES...NO...NA

a. If yes, how many, and where: 2, Front

3. Were custody seals on containers?..... NO...YES...NA

4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA

5. Were custody papers inside cooler?..... YES...NO...NA

6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA

7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA

8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert  
Ziplock Baggies Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA

12. Did all container labels and tags agree with custody papers?..... YES...NO...NA

13. Were correct containers used for the analysis requested?..... YES...NO...NA

14. a. Were VOA vials received?..... YES...NO...NA

b. Was there any observable head space present in any VOA vial?..... NO...YES...NA

15. Was sufficient amount of sample sent in each container?..... YES...NO...NA

16. Were correct preservatives used?..... YES...NO...NA

If not, record standard ID of preservative used here \_\_\_\_\_

17. Was residual chlorine present?..... NO...YES...NA

18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:

Bags labeled, not containers,

Consultant Name: Holger's Fabric & Assoc. Inc

Address: 143 S. Ferguson St

City/State/Zip: Ventura CA 93001

ExxonMobil Project Mgr: Tom Shook

Telephone Number: (805) 652-0219 Fax No.: (805) 652-0793

Sampler Name: (Print) Tom Shook

Sampler Signature: Tom Shook

Report To: James Anderson

Invoice To: (ExxonMobil PM unless otherwise indicate)

Account #: 10166

PO #: 45058322951

Facility ID #: 18-EBK

Site Address: 1727 Artesia Blvd

City, State, Zip: Manhattan Beach CA

Regulatory District (CA): LA County

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix							Analyze For:										RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	Fax Results																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
							Ice	HNO <sub>3</sub> (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (Specify):	8015 TPH, CILUMF	8260 MTBE/131E	5 CA 02/92																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

### Special Instructions:

### Laboratory Comments:

Temperature Upon Receipt:

Sample Containers Intact?

VOCs Free of Headspace?

Y

N

Y

N

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

5/17/05

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-EBK  
Project Number: .  
Laboratory Project Number: 415291.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Sample Identification	Lab Number	Collection Date
-----	-----	-----
B-8-W	05-A64789	5/ 2/05
B-8-20	05-A64790	5/ 2/05
B-8-30	05-A64791	5/ 2/05
B-8-40	05-A64792	5/ 2/05
B-8-50	05-A64793	5/ 2/05
B-8-60	05-A64794	5/ 2/05
B-8-70	05-A64795	5/ 2/05
B-8-80	05-A64796	5/ 2/05
B-8-85	05-A64797	5/ 2/05



Sample Identification

Lab Number

Collection Date

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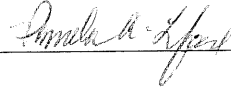
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These results relate only to the items tested.

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permission of the laboratory.

Report Approved By:



Report Date: 5/17/05

Johnny A. Mitchell, Laboratory Director  
Michael H. Dunn, M.S., Technical Director  
Pamela A. Langford, Senior Project Manager  
Eric S. Smith, QA/QC Director

Gail A. Lage, Senior Project Manager  
Glenn L. Norton, Technical Services  
Kelly S. Comstock, Technical Services  
Roxanne L. Connor, Senior Project Manager

Laboratory Certification Number: 01168CA

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## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64789  
Sample ID: B-8-W  
Sample Type: Water  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 14:30  
Date Received: 5/ 6/05  
Time Received: 7:55

Purchase Order: !4505722951

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<0.50		ug/l	0.50	0.27	1.	5/12/05	5:20	8260B	A. Steimle	4101
**tert-amyl methyl ether	<0.50		ug/L	0.50	0.30	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Tertiary butyl alcohol	<10.0		ug/l	10.0	4.28	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Benzene	<0.50		ug/l	0.50	0.25	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Ethylbenzene	<0.50		ug/l	0.50	0.19	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Toluene	<0.50		ug/l	0.50	0.17	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Xylenes (Total)	<0.50		ug/l	0.50	0.33	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Methyl-t-butyl ether	<0.50		ug/l	0.50	0.23	1.	5/12/05	5:20	8260B	A. Steimle	4101
**Diisopropyl ether	<0.50		ug/l	0.50	0.18	1.	5/12/05	5:20	8260/SA05-77	A. Steimle	4101
**TPH-GC											
**TPH (Gasoline Range)	<50.0		ug/l	50.0	33.0	1.	5/ 9/05	20:07	CA-LUPT	J. Freeman	566

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	104.	63. - 134.
VOA Surr 1,2-DCA-d4	86.	70. - 130.
VOA Surr 1,2-DCA-d4	86.	70. - 130.
VOA Surr Toluene-d8	94.	78. - 121.
VOA Surr Toluene-d8	94.	78. - 121.
VOA Surr, 4-BFB	98.	78. - 126.
VOA Surr, 4-BFB	98.	78. - 126.
VOA Surr, DBFM	100.	79. - 122.
VOA Surr, DBFM	100.	79. - 122.

**ANALYTICAL REPORT**

Laboratory Number: 05-A64789  
Sample ID: B-8-W

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**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64790  
Sample ID: B-8-20  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 12:10  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.1		ug/kg	2.1	0.7	1.	5/13/05	20:49	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.1		ug/Kg	2.1	0.8	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<52.3		ug/kg	52.3	11.9	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Benzene	24.7		ug/kg	2.1	0.8	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Ethylbenzene	<2.1		ug/kg	2.1	0.5	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Toluene	<2.1		ug/kg	2.1	0.5	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Xylenes (Total)	<2.1		ug/kg	2.1	1.4	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.1		ug/kg	2.1	0.9	1.	5/13/05	20:49	8260B	J. Bundy	6376
**Diisopropyl ether	<2.1		ug/kg	2.1	0.8	1.	5/13/05	20:49	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<1980		ug/kg	1980	310	1.	5/ 9/05	17:15	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	93.4		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.78 g	5.0 ml	5/ 2/05	12:10	J. Bundy	5035
BTX Prep	5.05 g	10.0 ml	5/ 2/05	12:10	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64790  
Sample ID: B-8-20

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	78.	56. - 145.
VOA Surr, 1,2-DCAd4	101.	72. - 125.
VOA Surr Toluene-d8	115.	80. - 124.
VOA Surr, 4-BFB	121.	25. - 185.
VOA Surr, DBFM	89.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64791  
Sample ID: B-8-30  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 12:20  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.2		ug/kg	2.2	0.8	1.	5/13/05	21:19	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.2		ug/Kg	2.2	0.9	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<54.9		ug/kg	54.9	12.5	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Benzene	11.8		ug/kg	2.2	0.9	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Ethylbenzene	<2.2		ug/kg	2.2	0.5	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Toluene	<2.2		ug/kg	2.2	0.5	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Xylenes (Total)	<2.2		ug/kg	2.2	1.4	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.2		ug/kg	2.2	1.0	1.	5/13/05	21:19	8260B	J. Bundy	6376
**Diisopropyl ether	<2.2		ug/kg	2.2	0.9	1.	5/13/05	21:19	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<2260		ug/kg	2260	310	1.	5/ 9/05	17:44	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	92.7		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.55 g	5.0 ml	5/ 2/05	12:20	J. Bundy	5035
BTX Prep	4.42 g	10.0 ml	5/ 2/05	12:20	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64791  
Sample ID: B-8-30

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Surrogate -----	% Recovery -----	Target Range -----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCAd4	102.	72. - 125.
VOA Surr Toluene-d8	115.	80. - 124.
VOA Surr, 4-BFB	121.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64792  
Sample ID: B-8-40  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 12:30  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.2		ug/kg	2.2	0.8	1.	5/13/05	21:49	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.2		ug/Kg	2.2	0.9	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<56.2		ug/kg	56.2	12.8	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Benzene	8.8		ug/kg	2.2	0.9	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Ethylbenzene	<2.2		ug/kg	2.2	0.6	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Toluene	<2.2		ug/kg	2.2	0.6	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Xylenes (Total)	<2.2		ug/kg	2.2	1.5	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.2		ug/kg	2.2	1.0	1.	5/13/05	21:49	8260B	J. Bundy	6376
**Diisopropyl ether	<2.2		ug/kg	2.2	0.9	1.	5/13/05	21:49	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<2440		ug/kg	2440	310	1.	5/ 9/05	18:13	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	95.5		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.45 g	5.0 ml	5/ 2/05	12:30	J. Bundy	5035
BTX Prep	4.09 g	10.0 ml	5/ 2/05	12:30	H. Wagner	5035



**ANALYTICAL REPORT**

Laboratory Number: 05-A64792  
Sample ID: B-8-40

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCA <sub>d4</sub>	100.	72. - 125.
VOA Surr Toluene- <sub>d8</sub>	114.	80. - 124.
VOA Surr, 4-BFB	120.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64793  
Sample ID: B-8-50  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 12:40  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.4		ug/kg	2.4	0.8	1.	5/13/05	22:19	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.4		ug/Kg	2.4	0.9	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<58.8		ug/kg	58.8	13.4	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Benzene	7.1		ug/kg	2.4	0.9	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Ethylbenzene	<2.4		ug/kg	2.4	0.6	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Toluene	<2.4		ug/kg	2.4	0.6	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Xylenes (Total)	<2.4		ug/kg	2.4	1.5	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.4		ug/kg	2.4	1.1	1.	5/13/05	22:19	8260B	J. Bundy	6376
**Diisopropyl ether	<2.4		ug/kg	2.4	0.9	1.	5/13/05	22:19	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<2210		ug/kg	2210	310	1.	5/ 9/05	18:41	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	92.9		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.25 g	5.0 ml	5/ 2/05	12:40	J. Bundy	5035
BTX Prep	4.52 g	10.0 ml	5/ 2/05	12:40	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64793  
Sample ID: B-8-50

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCAd4	99.	72. - 125.
VOA Surr Toluene-d8	115.	80. - 124.
VOA Surr, 4-BFB	121.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64794  
Sample ID: B-8-60  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 12:50  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.0		ug/kg	2.0	0.7	1.	5/13/05	22:49	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.0		ug/Kg	2.0	0.8	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<48.8		ug/kg	48.8	11.1	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Benzene	5.1		ug/kg	2.0	0.8	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Ethylbenzene	<2.0		ug/kg	2.0	0.5	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Toluene	0.8	J	ug/kg	2.0	0.5	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Xylenes (Total)	<2.0		ug/kg	2.0	1.3	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.0		ug/kg	2.0	0.9	1.	5/13/05	22:49	8260B	J. Bundy	6376
**Diisopropyl ether	<2.0		ug/kg	2.0	0.8	1.	5/13/05	22:49	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<2020		ug/kg	2020	310	1.	5/ 9/05	19:10	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	84.4		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.12 g	5.0 ml	5/ 2/05	12:50	J. Bundy	5035
BTX Prep	4.95 g	10.0 ml	5/ 2/05	12:50	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64794  
Sample ID: B-8-60

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	91.	56. - 145.
VOA Surr, 1,2-DCAd4	99.	72. - 125.
VOA Surr Toluene-d8	114.	80. - 124.
VOA Surr, 4-BFB	121.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64795  
Sample ID: B-8-70  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 14:05  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.3		ug/kg	2.3	0.8	1.	5/13/05	23:19	8260B	J. Bundy	6376
**tert-methyl amyl ether	<2.3		ug/Kg	2.3	0.9	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<58.0		ug/kg	58.0	13.2	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Benzene	5.0		ug/kg	2.3	0.9	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Ethylbenzene	<2.3		ug/kg	2.3	0.6	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Toluene	1.0	J	ug/kg	2.3	0.6	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Xylenes (Total)	<2.3		ug/kg	2.3	1.5	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<2.3		ug/kg	2.3	1.0	1.	5/13/05	23:19	8260B	J. Bundy	6376
**Diisopropyl ether	<2.3		ug/kg	2.3	0.9	1.	5/13/05	23:19	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<2310		ug/kg	2310	310	1.	5/ 9/05	19:39	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	92.9		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.31 g	5.0 ml	5/ 2/05	14:05	J. Bundy	5035
BTX Prep	4.32 g	10.0 ml	5/ 2/05	14:05	H. Wagner	5035

ANALYTICAL REPORT

Laboratory Number: 05-A64795  
Sample ID: B-8-70

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Surrogate -----	% Recovery -----	Target Range -----
UST surr-Trifluorotoluene	82.	56. - 145.
VOA Surr, 1,2-DCA <sub>d4</sub>	102.	72. - 125.
VOA Surr Toluene- <sub>d8</sub>	117.	80. - 124.
VOA Surr, 4-BFB	123.	25. - 185.
VOA Surr, DBFM	87.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64796  
Sample ID: B-8-80  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 14:15  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	5/13/05	23:49	8260B	J. Bundy	6376
**tert-methyl amyl ether	<1.7		ug/Kg	1.7	0.7	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Tertiary butyl alcohol	<43.5		ug/kg	43.5	9.91	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Benzene	3.2		ug/kg	1.7	0.7	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Ethylbenzene	<1.7		ug/kg	1.7	0.4	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Toluene	0.9	J	ug/kg	1.7	0.4	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Xylenes (Total)	<1.7		ug/kg	1.7	1.1	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Methyl-t-butyl ether	<1.7		ug/kg	1.7	0.8	1.	5/13/05	23:49	8260B	J. Bundy	6376
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	5/13/05	23:49	8260/SA05-77	J. Bundy	6376
**TPH-GC											
**TPH (GRO C4-C12)	<1860		ug/kg	1860	310	1.	5/ 9/05	20:08	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	78.2		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	5.75 g	5.0 ml	5/ 2/05	14:15	J. Bundy	5035
BTX Prep	5.39 g	10.0 ml	5/ 2/05	14:15	H. Wagner	5035



**ANALYTICAL REPORT**

Laboratory Number: 05-A64796  
Sample ID: B-8-80

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Surrogate -----	% Recovery -----	Target Range -----
UST surr-Trifluorotoluene	81.	56. - 145.
VOA Surr, 1,2-DCAd4	105.	72. - 125.
VOA Surr Toluene-d8	114.	80. - 124.
VOA Surr, 4-BFB	122.	25. - 185.
VOA Surr, DBFM	92.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64797  
Sample ID: B-8-85  
Sample Type: Soil  
Site ID:

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 14:20  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	5/15/05	18:10	8260B	J. Bundy	8072
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.8	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Tertiary butyl alcohol	<47.8		ug/kg	47.8	10.9	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Benzene	<1.9		ug/kg	1.9	0.8	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Ethylbenzene	<1.9		ug/kg	1.9	0.5	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Toluene	1.0	J	ug/kg	1.9	0.5	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Xylenes (Total)	<1.9		ug/kg	1.9	1.2	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Methyl-t-butyl ether	<1.9		ug/kg	1.9	0.9	1.	5/15/05	18:10	8260B	J. Bundy	8072
**Diisopropyl ether	<1.9		ug/kg	1.9	0.8	1.	5/15/05	18:10	8260/SA05-77	J. Bundy	8072
**TPH-GC											
**TPH (GRO C4-C12)	<1630		ug/kg	1630	310	1.	5/ 9/05	20:37	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	77.4		%				5/13/05	9:13	CLP	A. Runnels	9963

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.23 g	5.0 ml	5/ 2/05	14:20	J. Bundy	5035
BTX Prep	6.14 g	10.0 ml	5/ 2/05	14:20	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64797  
Sample ID: B-8-85

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	85.	56. - 145.
VOA Surr, 1,2-DCA <sub>d4</sub>	73.	72. - 125.
VOA Surr Toluene-d <sub>8</sub>	100.	80. - 124.
VOA Surr, 4-BFB	84.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----
**UST ANALYSIS**								
TPH (GRO C4-C12)	mg/kg	< 0.31	8.65	10.0	86	52. - 150.	1465	blank
TPH (GRO C4-C12)	mg/kg	< 0.31	9.41	10.0	94	52. - 150.	1465	M:blank

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**								
Benzene	mg/l	0.00160	0.0653	0.0500	127	62. - 143.	4101	65304
Benzene	mg/l	0.00160	0.0636	0.0500	124	62. - 143.	4101	M:65304
Benzene	mg/kg	< 0.0008	0.0500	0.0500	100	53. - 136.	6376	blank
Benzene	mg/kg	< 0.0008	0.0483	0.0500	97	53. - 136.	6376	M:blank
Benzene	mg/kg	< 0.0008	0.0525	0.0500	105	53. - 136.	8072	blank
Benzene	mg/kg	< 0.0008	0.0507	0.0500	101	53. - 136.	8072	M:blank
Toluene	mg/l	< 0.00050	0.0544	0.0500	109	63. - 141.	4101	65304
Toluene	mg/l	< 0.00050	0.0541	0.0500	108	63. - 141.	4101	M:65304
Toluene	mg/kg	< 0.0005	0.0445	0.0500	89	43. - 139.	6376	blank
Toluene	mg/kg	< 0.0005	0.0445	0.0500	89	43. - 139.	6376	M:blank
Toluene	mg/kg	< 0.0005	0.0506	0.0500	101	43. - 139.	8072	blank
Toluene	mg/kg	< 0.0005	0.0505	0.0500	101	43. - 139.	8072	M:blank
VOA Surr, 1,2-DCAd4	% Rec				104	72. - 125.	6376	
VOA Surr, 1,2-DCAd4	% Rec				101	72. - 125.	6376	
VOA Surr, 1,2-DCAd4	% Rec				72	72. - 125.	8072	
VOA Surr, 1,2-DCAd4	% Rec				74	72. - 125.	8072	
VOA Surr Toluene-d8	% Rec				116	80. - 124.	6376	
VOA Surr Toluene-d8	% Rec				119	80. - 124.	6376	
VOA Surr Toluene-d8	% Rec				98	80. - 124.	8072	
VOA Surr Toluene-d8	% Rec				97	80. - 124.	8072	
VOA Surr, 4-BFB	% Rec				118	25. - 185.	6376	
VOA Surr, 4-BFB	% Rec				119	25. - 185.	6376	
VOA Surr, 4-BFB	% Rec				89	25. - 185.	8072	

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA Surr, 4-BFB	% Rec				87	25. - 185.	8072	
VOA Surr, DBFM	% Rec				90	73. - 124.	6376	
VOA Surr, DBFM	% Rec				89	73. - 124.	6376	
VOA Surr, DBFM	% Rec				91	73. - 124.	8072	
VOA Surr, DBFM	% Rec				91	73. - 124.	8072	

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
**UST PARAMETERS**						
TPH (GRO C4-C12)	mg/kg	8.65	9.41	8.42	39.	1465

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
**VOA PARAMETERS**						
Benzene	mg/l	0.0653	0.0636	2.64	27.	4101
Benzene	mg/kg	0.0500	0.0483	3.46	34.	6376
Benzene	mg/kg	0.0525	0.0507	3.49	34.	8072
Toluene	mg/l	0.0544	0.0541	0.55	34.	4101
Toluene	mg/kg	0.0445	0.0445	0.00	39.	6376
Toluene	mg/kg	0.0506	0.0505	0.20	39.	8072
VOA Surr 1,2-DCA-d4	% Rec		83.			4086
VOA Surr 1,2-DCA-d4	% Rec		83.			4101
VOA Surr, 1,2-DCAd4	% Rec		101.			6376
VOA Surr, 1,2-DCAd4	% Rec		74.			8072
VOA Surr Toluene-d8	% Rec		94.			4086
VOA Surr Toluene-d8	% Rec		94.			4101
VOA Surr Toluene-d8	% Rec		119.			6376
VOA Surr Toluene-d8	% Rec		97.			8072

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
VOA Surr, 4-BFB	% Rec		95.			4086
VOA Surr, 4-BFB	% Rec		95.			4101
VOA Surr, 4-BFB	% Rec		119.			6376
VOA Surr, 4-BFB	% Rec		87.			8072
VOA Surr, DBFM	% Rec		101.			4086
VOA Surr, DBFM	% Rec		101.			4101
VOA Surr, DBFM	% Rec		89.			6376
VOA Surr, DBFM	% Rec		91.			8072

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**UST PARAMETERS**						
TPH (GRO C4-C12)	mg/kg	10.0	9.69	97	74 - 127	1465
TPH (Gasoline Range)	mg/l	1.00	0.984	98	64 - 130	566
BTEX/GRO Surr., a,a,a-TFT	% Recovery			98	63 - 134	566

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**						
Ethyl-t-butylether	mg/l	0.0500	0.0514	103	67 - 140	4101
Ethyl-t-butylether	mg/kg	0.0500	0.0474	95	67 - 137	6376
Ethyl-t-butylether	mg/kg	0.0500	0.0514	103	67 - 137	8072
tert-amyl methyl ether	mg/L	0.0500	0.0529	106	68 - 134	4101
tert-methyl amyl ether	mg/Kg	0.0500	0.0389	78	64 - 142	6376
tert-methyl amyl ether	mg/Kg	0.0500	0.0540	108	64 - 142	8072
Tertiary butyl alcohol	mg/l	0.500	0.496	99	28 - 182	4101
Tertiary butyl alcohol	mg/kg	0.500	0.377	75	36 - 159	6376
Tertiary butyl alcohol	mg/kg	0.500	0.388	78	36 - 159	8072

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
Benzene	mg/l	0.0500	0.0602	120	78 - 123	4101
Benzene	mg/kg	0.0500	0.0502	100	76 - 124	6376
Benzene	mg/kg	0.0500	0.0561	112	76 - 124	8072
Ethylbenzene	mg/l	0.0500	0.0510	102	80 - 124	4101
Ethylbenzene	mg/kg	0.0500	0.0501	100	70 - 128	6376
Ethylbenzene	mg/kg	0.0500	0.0567	113	70 - 128	8072
Toluene	mg/l	0.0500	0.0521	104	77 - 124	4101
Toluene	mg/kg	0.0500	0.0493	99	72 - 125	6376
Toluene	mg/kg	0.0500	0.0552	110	72 - 125	8072
Xylenes (Total)	mg/l	0.150	0.154	103	81 - 124	4101
Xylenes (Total)	mg/kg	0.150	0.145	97	71 - 129	6376
Xylenes (Total)	mg/kg	0.150	0.163	109	71 - 129	8072
Methyl-t-butyl ether	mg/l	0.0500	0.0517	103	69 - 136	4101
Methyl-t-butyl ether	mg/kg	0.0500	0.0427	85	67 - 138	6376
Methyl-t-butyl ether	mg/kg	0.0500	0.0509	102	67 - 138	8072
Diisopropyl ether	mg/l	0.0500	0.0553	111	65 - 140	4101
Diisopropyl ether	mg/kg	0.0500	0.0578	116	70 - 131	6376
Diisopropyl ether	mg/kg	0.0500	0.0470	94	70 - 131	8072
VOA Surr 1,2-DCA-d4	% Rec			82	70 - 130	4086
VOA Surr 1,2-DCA-d4	% Rec			82	70 - 130	4101
VOA Surr, 1,2-DCA-d4	% Rec			105	72 - 125	6376
VOA Surr, 1,2-DCA-d4	% Rec			71	72 - 125	8072
VOA Surr Toluene-d8	% Rec			94	78 - 121	4086
VOA Surr Toluene-d8	% Rec			94	78 - 121	4101
VOA Surr Toluene-d8	% Rec			115	80 - 124	6376
VOA Surr Toluene-d8	% Rec			99	80 - 124	8072
VOA Surr, 4-BFB	% Rec			93	78 - 126	4086
VOA Surr, 4-BFB	% Rec			93	78 - 126	4101
VOA Surr, 4-BFB	% Rec			120	25 - 185	6376
VOA Surr, 4-BFB	% Rec			82	25 - 185	8072
VOA Surr, DBFM	% Rec			100	79 - 122	4086
VOA Surr, DBFM	% Rec			100	79 - 122	4101
VOA Surr, DBFM	% Rec			92	73 - 124	6376
VOA Surr, DBFM	% Rec			94	73 - 124	8072

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**UST PARAMETERS**					
TPH (GRO C4-C12)	< 0.31	mg/kg	1465	5/ 9/05	16:46
TPH (Gasoline Range)	< 0.0500	mg/l	566	5/ 9/05	15:22

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**UST PARAMETERS**					
UST surr-Trifluorotoluene	80.	% Recovery	1465	5/ 9/05	16:46
BTEX/GRO Surr., a,a,a-TFT	105.	% Recovery	566	5/ 9/05	15:22

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**					
Ethyl-t-butylether	< 0.00027	mg/l	4101	5/11/05	23:53
Ethyl-t-butylether	< 0.0007	mg/kg	6376	5/13/05	14:50
Ethyl-t-butylether	< 0.0007	mg/kg	8072	5/15/05	11:39
tert-amyl methyl ether	< 0.00030	mg/L	4101	5/11/05	23:53
tert-methyl amyl ether	< 0.0008	mg/Kg	6376	5/13/05	14:50
tert-methyl amyl ether	< 0.0008	mg/Kg	8072	5/15/05	11:39
Tertiary butyl alcohol	< 0.00428	mg/l	4101	5/11/05	23:53
Tertiary butyl alcohol	< 0.0114	mg/kg	6376	5/13/05	14:50
Tertiary butyl alcohol	< 0.0114	mg/kg	8072	5/15/05	11:39
Benzene	< 0.00025	mg/l	4101	5/11/05	23:53
Benzene	< 0.0008	mg/kg	6376	5/13/05	14:50
Benzene	< 0.0008	mg/kg	8072	5/15/05	11:39
Ethylbenzene	< 0.00019	mg/l	4101	5/11/05	23:53
Ethylbenzene	< 0.0005	mg/kg	6376	5/13/05	14:50
Ethylbenzene	< 0.0005	mg/kg	8072	5/15/05	11:39



## PROJECT QUALITY CONTROL DATA

Project Number:

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Toluene	< 0.00017	mg/l	4101	5/11/05	23:53
Toluene	< 0.0005	mg/kg	6376	5/13/05	14:50
Toluene	< 0.0005	mg/kg	8072	5/15/05	11:39
Xylenes (Total)	< 0.00033	mg/l	4101	5/11/05	23:53
Xylenes (Total)	< 0.0013	mg/kg	6376	5/13/05	14:50
Xylenes (Total)	< 0.0013	mg/kg	8072	5/15/05	11:39
Methyl-t-butyl ether	< 0.00023	mg/l	4101	5/11/05	23:53
Methyl-t-butyl ether	< 0.0009	mg/kg	6376	5/13/05	14:50
Methyl-t-butyl ether	< 0.0009	mg/kg	8072	5/15/05	11:39
Diisopropyl ether	< 0.00018	mg/l	4101	5/11/05	23:53
Diisopropyl ether	< 0.0008	mg/kg	6376	5/13/05	14:50
Diisopropyl ether	< 0.0008	mg/kg	8072	5/15/05	11:39
VOA Surr 1,2-DCA-d4	86.	% Rec	4086	5/11/05	23:53
VOA Surr 1,2-DCA-d4	86.	% Rec	4101	5/11/05	23:53
VOA Surr, 1,2-DCA-d4	98.	% Rec	6376	5/13/05	14:50
VOA Surr, 1,2-DCA-d4	77.	% Rec	8072	5/15/05	11:39
VOA Surr Toluene-d8	94.	% Rec	4086	5/11/05	23:53
VOA Surr Toluene-d8	94.	% Rec	4101	5/11/05	23:53
VOA Surr Toluene-d8	114.	% Rec	6376	5/13/05	14:50
VOA Surr Toluene-d8	94.	% Rec	8072	5/15/05	11:39
VOA Surr, 4-BFB	100.	% Rec	4086	5/11/05	23:53
VOA Surr, 4-BFB	100.	% Rec	4101	5/11/05	23:53
VOA Surr, 4-BFB	122.	% Rec	6376	5/13/05	14:50
VOA Surr, 4-BFB	85.	% Rec	8072	5/15/05	11:39
VOA Surr, DBFM	100.	% Rec	4086	5/11/05	23:53
VOA Surr, DBFM	100.	% Rec	4101	5/11/05	23:53
VOA Surr, DBFM	88.	% Rec	6376	5/13/05	14:50
VOA Surr, DBFM	92.	% Rec	8072	5/15/05	11:39

# = Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 415291

## Nashville Division

### COOLER RECEIPT FORM

BC#



Client Name : HFZ

Cooler Received/Opened On: 5/06/05 Accessioned By: Shawn Gracey

[Signature]  
Log-in Personnel Signature

1. Temperature of Cooler when triaged: 2.0 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
  - a. If yes, how many, and where: 2, Front
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
5. Were custody papers inside cooler?..... YES...NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
8. What kind of packing material used? Bubblewrap    Peanuts    Vermiculite    Foam Insert  
Ziplock Baggies    Paper    Other    None
9. Cooling process: Ice    Ice-pack    Ice (direct contact)    Dry ice    Other    None
10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA  
b. Was there any observable head space present in any VOA vial?..... NO...YES...NA See if
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA

If not, record standard ID of preservative used here \_\_\_\_\_

17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:  
8590

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:

Bags labeled, not containers,

## ExxonMobil.

**INCORPORATED**

<b>RUSH TAT (Pre-Schedule)</b>
TAT request (in Bus. Days)
STD TAT
Fax Results

Temperature Upon Receipt:	
Sample Containers Intact?	Y
VOCs Free of Headspace?	N

## Nashville Division

### COOLER RECEIPT FORM

BC#



Client Name : HFA, INC.

Cooler Received/Opened On: 5/6/05 Accessioned By: James D. Jacobs

[Signature]  
Log-in Personnel Signature

1. Temperature of Cooler when triaged: 1.5 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
  - a. If yes, how many and where: 2 Front
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
5. Were custody papers inside cooler?..... YES...NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
8. What kind of packing material used? Bubblewrap    Peanuts    Vermiculite    Foam Insert  
    Ziplock baggies    Paper    Other    None
9. Cooling process: Ice    Ice-pack    Ice (direct contact)    Dry ice    Other    None
10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA
  - b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA
 

If not, record standard ID of preservative used here \_\_\_\_\_
17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:

8589

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615-726-0177  
Toll Free: 800-765-0980  
Fax: 615-726-3404



415264

Consultant Name: Holguin, Fabian & Assoc. Inc.  
Address: 143 S. Figueroa St.

City/State/Zip: Ventura CA 93001

**ExxonMobil Project Mgr:**

Telephone Number (805) 652-0219 Fax No.: (805) 652-0793

Sampler Name: (Print) Tom Shook

Sampler Signature: 

Report To: James Anderson

**Invoice To:** (ExxonMobil PM unless otherwise indicate)

Account #: 10166

PO #: 1505822951

Facility ID # 18-EBK

Site Address 727 Artesia Blvd

City, State, Zip  
Manhattan Beach CA

Regulatory District (CA) of LA County

[illegible]

**Special Instructions:**

	Laboratory Comments:	
--	----------------------	--

Temperature Upon Receipt:

Sample Containers Intact? ☒ Y ☐ N

VOCs Free of Headspace? Y N

Relinquished by:

Date	Time
------	------

Received by:

Time:

Date	Time
------	------

Relinquished by:

Time

Received by TestAmerica:

Time

Date \_\_\_\_\_ Time \_\_\_\_\_

SSC 5/10/15

5/17/05

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-EBK  
Project Number: .  
Laboratory Project Number: 415264.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Sample Identification	Lab Number	Page 1 Collection Date
-----	-----	-----
B-6-20	05-A64672	5/ 2/05
B-6-30	05-A64673	5/ 2/05
B-6-40	05-A64674	5/ 2/05
B-6-50	05-A64675	5/ 2/05
B-6-55	05-A64676	5/ 2/05
B-7-20	05-A64677	5/ 2/05
B-7-30	05-A64678	5/ 2/05
B-7-40	05-A64679	5/ 2/05
B-7-50	05-A64680	5/ 2/05
B-7-55	05-A64681	5/ 2/05

Sample Identification

Lab Number

Collection Date

-----

-----

-----

These results relate only to the items tested.

This report shall not be reproduced except in full and with  
permission of the laboratory.

Report Approved By:

Roxanne L. Connor

Report Date: 5/17/05

Johnny A. Mitchell, Laboratory Director  
Michael H. Dunn, M.S., Technical Director  
Pamela A. Langford, Senior Project Manager  
Eric S. Smith, QA/QC Director

Gail A. Lage, Senior Project Manager  
Glenn L. Norton, Technical Services  
Kelly S. Comstock, Technical Services  
Roxanne L. Connor, Senior Project Manager

Laboratory Certification Number: 01168CA

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## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64672  
Sample ID: B-6-20  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 8:35  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	5/10/05	3:42	8260B	J. Yun	3621
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	5/10/05	3:42	8260B	J. Yun	3621
**Tertiary butyl alcohol	<44.0		ug/kg	44.0	10.0	1.	5/10/05	3:42	8260B	J. Yun	3621
**Benzene	<1.8		ug/kg	1.8	0.7	1.	5/10/05	3:42	8260B	J. Yun	3621
**Ethylbenzene	<1.8		ug/kg	1.8	0.4	1.	5/10/05	3:42	8260B	J. Yun	3621
**Toluene	<1.8		ug/kg	1.8	0.4	1.	5/10/05	3:42	8260B	J. Yun	3621
**Xylenes (Total)	<1.8		ug/kg	1.8	1.1	1.	5/10/05	3:42	8260B	J. Yun	3621
**Methyl-t-butyl ether	<1.8		ug/kg	1.8	0.8	1.	5/10/05	3:42	8260B	J. Yun	3621
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	5/10/05	3:42	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<1760		ug/kg	1760	310	1.	5/ 9/05	21:05	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	88.9	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	5.68 g	5.0 ml	5/ 2/05	8:35	N. Noman	5035
BTX Prep	5.67 g	10.0 ml	5/ 2/05	8:35	H. Wagner	5035



**ANALYTICAL REPORT**

Laboratory Number: 05-A64672  
Sample ID: B-6-20

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCAd4	125.	72. - 125.
VOA Surr Toluene-d8	103.	80. - 124.
VOA Surr, 4-BFB	104.	25. - 185.
VOA Surr, DBPM	107.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values  
below the Limit of Quantitation but above the Limit of Detection are  
qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64673  
Sample ID: B-6-30  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 8:50  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.4		ug/kg	2.4	0.8	1.	5/10/05	4:11	8260B	J. Yun	3621
**tert-methyl amyl ether	<2.4		ug/Kg	2.4	0.9	1.	5/10/05	4:11	8260B	J. Yun	3621
**Tertiary butyl alcohol	<59.1		ug/kg	59.1	13.5	1.	5/10/05	4:11	8260B	J. Yun	3621
**Benzene	<2.4		ug/kg	2.4	0.9	1.	5/10/05	4:11	8260B	J. Yun	3621
**Ethylbenzene	<2.4		ug/kg	2.4	0.6	1.	5/10/05	4:11	8260B	J. Yun	3621
**Toluene	<2.4		ug/kg	2.4	0.6	1.	5/10/05	4:11	8260B	J. Yun	3621
**Xylenes (Total)	<2.4		ug/kg	2.4	1.5	1.	5/10/05	4:11	8260B	J. Yun	3621
**Methyl-t-butyl ether	<2.4		ug/kg	2.4	1.1	1.	5/10/05	4:11	8260B	J. Yun	3621
**Diisopropyl ether	<2.4		ug/kg	2.4	0.9	1.	5/10/05	4:11	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<2050		ug/kg	2050	310	1.	5/ 9/05	21:34	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	94.7	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.23 g	5.0 ml	5/ 2/05	8:50	N. Noman	5035
BTX Prep	4.88 g	10.0 ml	5/ 2/05	8:50	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64673  
Sample ID: B-6-30

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	79.	56. - 145.
VOA Surr, 1,2-DCAd4	131. #	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	102.	25. - 185.
VOA Surr, DBFM	108.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

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J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64674  
Sample ID: B-6-40  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 9:00  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.2		ug/kg	2.2	0.8	1.	5/10/05	4:41	8260B	J. Yun	3621
**tert-methyl amyl ether	<2.2		ug/Kg	2.2	0.9	1.	5/10/05	4:41	8260B	J. Yun	3621
**Tertiary butyl alcohol	<54.2		ug/kg	54.2	12.4	1.	5/10/05	4:41	8260B	J. Yun	3621
**Benzene	<2.2		ug/kg	2.2	0.9	1.	5/10/05	4:41	8260B	J. Yun	3621
**Ethylbenzene	<2.2		ug/kg	2.2	0.5	1.	5/10/05	4:41	8260B	J. Yun	3621
**Toluene	<2.2		ug/kg	2.2	0.5	1.	5/10/05	4:41	8260B	J. Yun	3621
**Xylenes (Total)	<2.2		ug/kg	2.2	1.4	1.	5/10/05	4:41	8260B	J. Yun	3621
**Methyl-t-butyl ether	<2.2		ug/kg	2.2	1.0	1.	5/10/05	4:41	8260B	J. Yun	3621
**Diisopropyl ether	<2.2		ug/kg	2.2	0.9	1.	5/10/05	4:41	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<2120		ug/kg	2120	310	1.	5/ 9/05	22:03	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	96.0	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.61 g	5.0 ml	5/ 2/05	9:00	N. Noman	5035
BTX Prep	4.71 g	10.0 ml	5/ 2/05	9:00	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64674  
Sample ID: B-6-40

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	88.	56. - 145.
VOA Surr, 1,2-DCAd4	130. #	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	108.	25. - 185.
VOA Surr, DBFM	111.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64675  
Sample ID: B-6-50  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 10:10  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.4		ug/kg	2.4	0.8	1.	5/10/05	5:11	8260B	J. Yun	3621
**tert-methyl amyl ether	<2.4		ug/Kg	2.4	1.0	1.	5/10/05	5:11	8260B	J. Yun	3621
**Tertiary butyl alcohol	<59.4		ug/kg	59.4	13.5	1.	5/10/05	5:11	8260B	J. Yun	3621
**Benzene	<2.4		ug/kg	2.4	1.0	1.	5/10/05	5:11	8260B	J. Yun	3621
**Ethylbenzene	<2.4		ug/kg	2.4	0.6	1.	5/10/05	5:11	8260B	J. Yun	3621
**Toluene	<2.4		ug/kg	2.4	0.6	1.	5/10/05	5:11	8260B	J. Yun	3621
**Xylenes (Total)	<2.4		ug/kg	2.4	1.5	1.	5/10/05	5:11	8260B	J. Yun	3621
**Methyl-t-butyl ether	<2.4		ug/kg	2.4	1.1	1.	5/10/05	5:11	8260B	J. Yun	3621
**Diisopropyl ether	<2.4		ug/kg	2.4	1.0	1.	5/10/05	5:11	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<1090		ug/kg	1090	310	1.	5/ 9/05	22:32	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	95.7	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.21 g	5.0 ml	5/ 2/05	10:10	N. Noman	5035
BTX Prep	4.57 g	5.0 ml	5/ 2/05	10:10	H. Wagner	5035

ANALYTICAL REPORT

Laboratory Number: 05-A64675  
Sample ID: B-6-50

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	82.	56. - 145.
VOA Surr, 1,2-DCAd4	133. #	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	103.	25. - 185.
VOA Surr, DBFM	109.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values  
below the Limit of Quantitation but above the Limit of Detection are  
qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64676  
Sample ID: B-6-55  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 10:15  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	5/10/05	5:41	8260B	J. Yun	3621
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.8	1.	5/10/05	5:41	8260B	J. Yun	3621
**Tertiary butyl alcohol	<47.9		ug/kg	47.9	10.9	1.	5/10/05	5:41	8260B	J. Yun	3621
**Benzene	<1.9		ug/kg	1.9	0.8	1.	5/10/05	5:41	8260B	J. Yun	3621
**Ethylbenzene	<1.9		ug/kg	1.9	0.5	1.	5/10/05	5:41	8260B	J. Yun	3621
**Toluene	<1.9		ug/kg	1.9	0.5	1.	5/10/05	5:41	8260B	J. Yun	3621
**Xylenes (Total)	<1.9		ug/kg	1.9	1.2	1.	5/10/05	5:41	8260B	J. Yun	3621
**Methyl-t-butyl ether	<1.9		ug/kg	1.9	0.9	1.	5/10/05	5:41	8260B	J. Yun	3621
**Diisopropyl ether	<1.9		ug/kg	1.9	0.8	1.	5/10/05	5:41	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<1920		ug/kg	1920	310	1.	5/ 9/05	23:00	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	83.8	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.22 g	5.0 ml	5/ 2/05	10:15	N. Noman	5035
BTX Prep	5.20 g	10.0 ml	5/ 2/05	10:15	H. Wagner	5035



**ANALYTICAL REPORT**

Laboratory Number: 05-A64676

Sample ID: B-6-55

Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCAd4	133. #	72. - 125.
VOA Surr Toluene-d8	105.	80. - 124.
VOA Surr, 4-BFB	106.	25. - 185.
VOA Surr, DBFM	111.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64677  
Sample ID: B-7-20  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 10:50  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	5/10/05	6:11	8260B	J. Yun	3621
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.8	1.	5/10/05	6:11	8260B	J. Yun	3621
**Tertiary butyl alcohol	<47.2		ug/kg	47.2	10.8	1.	5/10/05	6:11	8260B	J. Yun	3621
**Benzene	<1.9		ug/kg	1.9	0.8	1.	5/10/05	6:11	8260B	J. Yun	3621
**Ethylbenzene	<1.9		ug/kg	1.9	0.5	1.	5/10/05	6:11	8260B	J. Yun	3621
**Toluene	<1.9		ug/kg	1.9	0.5	1.	5/10/05	6:11	8260B	J. Yun	3621
**Xylenes (Total)	<1.9		ug/kg	1.9	1.2	1.	5/10/05	6:11	8260B	J. Yun	3621
**Methyl-t-butyl ether	<1.9		ug/kg	1.9	0.8	1.	5/10/05	6:11	8260B	J. Yun	3621
**Diisopropyl ether	<1.9		ug/kg	1.9	0.8	1.	5/10/05	6:11	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<1780		ug/kg	1780	310	1.	5/ 9/05	23:29	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	90.4	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	5.30 g	5.0 ml	5/ 2/05	10:50	N. Noman	5035
BTX Prep	5.62 g	10.0 ml	5/ 2/05	10:50	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64677  
Sample ID: B-7-20

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	77.	56. - 145.
VOA Surr, 1,2-DCAd4	133. #	72. - 125.
VOA Surr Toluene-d8	103.	80. - 124.
VOA Surr, 4-BFB	104.	25. - 185.
VOA Surr, DBFM	110.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64678  
Sample ID: B-7-30  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 11:00  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.1		ug/kg	2.1	0.7	1.	5/10/05	6:41	8260B	J. Yun	3621
**tert-methyl amyl ether	<2.1		ug/Kg	2.1	0.9	1.	5/10/05	6:41	8260B	J. Yun	3621
**Tertiary butyl alcohol	<53.2		ug/kg	53.2	12.1	1.	5/10/05	6:41	8260B	J. Yun	3621
**Benzene	<2.1		ug/kg	2.1	0.9	1.	5/10/05	6:41	8260B	J. Yun	3621
**Ethylbenzene	<2.1		ug/kg	2.1	0.5	1.	5/10/05	6:41	8260B	J. Yun	3621
**Toluene	<2.1		ug/kg	2.1	0.5	1.	5/10/05	6:41	8260B	J. Yun	3621
**Xylenes (Total)	<2.1		ug/kg	2.1	1.4	1.	5/10/05	6:41	8260B	J. Yun	3621
**Methyl-t-butyl ether	<2.1		ug/kg	2.1	1.0	1.	5/10/05	6:41	8260B	J. Yun	3621
**Diisopropyl ether	<2.1		ug/kg	2.1	0.9	1.	5/10/05	6:41	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<2090		ug/kg	2090	310	1.	5/ 9/05	23:58	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	94.1	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.70 g	5.0 ml	5/ 2/05	11:00	N. Noman	5035
BTX Prep	4.78 g	10.0 ml	5/ 2/05	11:00	H. Wagner	5035

ANALYTICAL REPORT

Laboratory Number: 05-A64678  
Sample ID: B-7-30

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Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	84.	56. - 145.
VOA Surr, 1,2-DCAd4	132. #	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	103.	25. - 185.
VOA Surr, DBFM	109.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.  
U = Analyte analyzed for but not detected.  
# = Recovery outside Laboratory historical or method prescribed limits.  
J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.  
B = Analyte was detected in the method blank.  
E = Estimated Value above the calibration limit of the instrument.  
All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64679  
Sample ID: B-7-40  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 11:10  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.2		ug/kg	2.2	0.8	1.	5/10/05	7:11	8260B	J. Yun	3621
**tert-methyl amyl ether	<2.2		ug/Kg	2.2	0.9	1.	5/10/05	7:11	8260B	J. Yun	3621
**Tertiary butyl alcohol	<54.9		ug/kg	54.9	12.5	1.	5/10/05	7:11	8260B	J. Yun	3621
**Benzene	<2.2		ug/kg	2.2	0.9	1.	5/10/05	7:11	8260B	J. Yun	3621
**Ethylbenzene	<2.2		ug/kg	2.2	0.5	1.	5/10/05	7:11	8260B	J. Yun	3621
**Toluene	<2.2		ug/kg	2.2	0.5	1.	5/10/05	7:11	8260B	J. Yun	3621
**Xylenes (Total)	<2.2		ug/kg	2.2	1.4	1.	5/10/05	7:11	8260B	J. Yun	3621
**Methyl-t-butyl ether	<2.2		ug/kg	2.2	1.0	1.	5/10/05	7:11	8260B	J. Yun	3621
**Diisopropyl ether	<2.2		ug/kg	2.2	0.9	1.	5/10/05	7:11	8260/SA05-77	J. Yun	3621
**TPH-GC											
**TPH (GRO C4-C12)	<2110		ug/kg	2110	310	1.	5/10/05	0:27	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	96.0	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.55 g	5.0 ml	5/ 2/05	11:10	N. Noman	5035
BTX Prep	4.74 g	10.0 ml	5/ 2/05	11:10	H. Wagner	5035

**ANALYTICAL REPORT**

Laboratory Number: 05-A64679  
Sample ID: B-7-40

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	83.	56. - 145.
VOA Surr, 1,2-DCAd4	134. #	72. - 125.
VOA Surr Toluene-d8	103.	80. - 124.
VOA Surr, 4-BFB	105.	25. - 185.
VOA Surr, DBFM	113.	73. - 124.

**LABORATORY COMMENTS:**

ND = Not detected at the limit of Quantitation.

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below the Limit of Quantitation but above the Limit of Detection are  
qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64680  
Sample ID: B-7-50  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 11:20  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<106.		ug/kg	106.	37.2	50.	5/15/05	14:11	8260B	J. Bundy	7925
**tert-methyl amyl ether	<106.		ug/Kg	106.	42.5	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Tertiary butyl alcohol	<2650		ug/kg	2650	605.	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Benzene	<106.		ug/kg	106.	42.5	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Ethylbenzene	<106.		ug/kg	106.	26.5	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Toluene	<106.		ug/kg	106.	26.5	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Xylenes (Total)	<106.		ug/kg	106.	69.0	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Methyl-t-butyl ether	<106.		ug/kg	106.	47.8	50.	5/15/05	14:11	8260B	J. Bundy	7925
**Diisopropyl ether	<106.		ug/kg	106.	42.5	50.	5/15/05	14:11	8260/SA05-77	J. Bundy	7925
**TPH-GC											
**TPH (GRO C4-C12)	<2270		ug/kg	2270	310	1.	5/10/05	0:55	CA-LUFT	H. Wagner	1465
**Miscellaneous Parameters											
% Dry Weight	93.9		%				5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
-----							
Volatile Organics	4.71 g	5.0 ml	5/ 2/05	11:20	N. Noman	5035	
BTX Prep	4.40 g	10.0 ml	5/ 2/05	11:20	H. Wagner	5035	



*ANALYTICAL REPORT*

Laboratory Number: 05-A64680  
Sample ID: B-7-50

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	78.	56. - 145.
VOA Surr, 1,2-DCAd4	73.	72. - 125.
VOA Surr Toluene-d8	101.	80. - 124.
VOA Surr, 4-BFB	79.	25. - 185.
VOA Surr, DBFM	86.	73. - 124.

LABORATORY COMMENTS:

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B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## ANALYTICAL REPORT

HOLGUIN, FAHAN & ASSOCIATES 10166  
JAMES ANDERSON  
143 SOUTH FIGUEROA STREET  
VENTURA, CA 93001

Lab Number: 05-A64681  
Sample ID: B-7-55  
Sample Type: Soil  
Site ID: 18-EBK

Project:  
Project Name: EXXONMOBIL 18-EBK  
Sampler: TOM SHOOK

Date Collected: 5/ 2/05  
Time Collected: 11:25  
Date Received: 5/ 6/05  
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
-----											
**Volatile Organics											
**Ethyl-t-butylether	<2.2		ug/kg	2.2	0.8	1.	5/12/05	17:26	8260B	J. Bundy	6049
**tert-methyl amyl ether	<2.2		ug/Kg	2.2	0.9	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Tertiary butyl alcohol	<54.6		ug/kg	54.6	12.4	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Benzene	<2.2		ug/kg	2.2	0.9	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Ethylbenzene	<2.2		ug/kg	2.2	0.5	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Toluene	<2.2		ug/kg	2.2	0.5	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Xylenes (Total)	<2.2		ug/kg	2.2	1.4	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Methyl-t-butyl ether	<2.2		ug/kg	2.2	1.0	1.	5/12/05	17:26	8260B	J. Bundy	6049
**Diisopropyl ether	<2.2		ug/kg	2.2	0.9	1.	5/12/05	17:26	8260/SA05-77	J. Bundy	6049
**TPH-GC											
**TPH (GRO C4-C12)	<2190		ug/kg	2190	310	1.	5/10/05	1:24	CA-LUFT	H. Wagner	1465

**Miscellaneous Parameters											
% Dry Weight	94.0	%					5/13/05	8:56	CLP	A. Runnels	9819

### Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
-----						
Volatile Organics	4.58 g	5.0 ml	5/ 2/05	11:25	N. Noman	5035
BTX Prep	4.56 g	10.0 ml	5/ 2/05	11:25	H. Wagner	5035

ANALYTICAL REPORT

Laboratory Number: 05-A64681  
Sample ID: B-7-55

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Surrogate	% Recovery	Target Range
-----	-----	-----
UST surr-Trifluorotoluene	80.	56. - 145.
VOA Surr, 1,2-DCAd4	97.	72. - 125.
VOA Surr Toluene-d8	112.	80. - 124.
VOA Surr, 4-BPB	119.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

# = Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values  
below the Limit of Quantitation but above the Limit of Detection are  
qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----
**UST ANALYSIS**								
TPH (GRO C4-C12)	mg/kg	< 0.31	8.65	10.0	86	52. - 150.	1465	blank
TPH (GRO C4-C12)	mg/kg	< 0.31	9.41	10.0	94	52. - 150.	1465	M:blank

### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**								
Benzene	mg/kg	< 0.0008	0.0434	0.0500	87	53. - 136.	3621	blank
Benzene	mg/kg	< 0.0008	0.0540	0.0500	108	53. - 136.	3621	M:blank
Benzene	mg/kg	0.0017	0.0524	0.0500	101	53. - 136.	6049	66714
Benzene	mg/kg	0.0017	0.0476	0.0500	92	53. - 136.	6049	M:66714
Toluene	mg/kg	< 0.0005	0.0420	0.0500	84	43. - 139.	3621	blank
Toluene	mg/kg	< 0.0005	0.0503	0.0500	101	43. - 139.	3621	M:blank
Toluene	mg/kg	0.0058	0.0547	0.0500	98	43. - 139.	6049	66714
Toluene	mg/kg	0.0058	0.0484	0.0500	85	43. - 139.	6049	M:66714
VOA Surr, 1,2-DCAd4	% Rec				141	72. - 125.	3621	
VOA Surr, 1,2-DCAd4	% Rec				138	72. - 125.	3621	
VOA Surr, 1,2-DCAd4	% Rec				97	72. - 125.	6049	
VOA Surr, 1,2-DCAd4	% Rec				106	72. - 125.	6049	
VOA Surr Toluene-d8	% Rec				109	80. - 124.	3621	
VOA Surr Toluene-d8	% Rec				107	80. - 124.	3621	
VOA Surr Toluene-d8	% Rec				111	80. - 124.	6049	
VOA Surr Toluene-d8	% Rec				108	80. - 124.	6049	
VOA Surr, 4-BFB	% Rec				115	25. - 185.	3621	
VOA Surr, 4-BFB	% Rec				117	25. - 185.	3621	
VOA Surr, 4-BFB	% Rec				119	25. - 185.	6049	
VOA Surr, 4-BFB	% Rec				118	25. - 185.	6049	
VOA Surr, DEFM	% Rec				109	73. - 124.	3621	
VOA Surr, DEFM	% Rec				113	73. - 124.	3621	
VOA Surr, DEFM	% Rec				92	73. - 124.	6049	

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----
VOA Surr, DBFM	% Rec				96	73. - 124.	6049

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**UST PARAMETERS**						
TPH (GRO C4-C12)	mg/kg	8.65	9.41	8.42	39.	1465

### Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**						
Benzene	mg/kg	0.0434	0.0540	21.77	34.	3621
Benzene	mg/kg	0.0524	0.0476	9.60	34.	6049
Toluene	mg/kg	0.0420	0.0503	17.98	39.	3621
Toluene	mg/kg	0.0547	0.0484	12.22	39.	6049
VOA Surr, 1,2-DCAd4	% Rec		138.			3621
VOA Surr, 1,2-DCAd4	% Rec		106.			6049
VOA Surr Toluene-d8	% Rec		107.			3621
VOA Surr Toluene-d8	% Rec		108.			6049
VOA Surr, 4-BFB	% Rec		117.			3621
VOA Surr, 4-BFB	% Rec		118.			6049
VOA Surr, DBFM	% Rec		113.			3621
VOA Surr, DBFM	% Rec		96.			6049

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**UST PARAMETERS**						
TPH (GRO C4-C12)	mg/kg	10.0	9.69	97	74 - 127	1465

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**						
Ethyl-t-butylether	mg/kg	0.0500	0.0521	104	67 - 137	3621
Ethyl-t-butylether	mg/kg	0.0500	0.0480	96	67 - 137	6049
Ethyl-t-butylether	mg/kg	0.0500	0.0514	103	67 - 137	7925
tert-methyl amyl ether	mg/Kg	0.0500	0.0538	108	64 - 142	3621
tert-methyl amyl ether	mg/Kg	0.0500	0.0403	81	64 - 142	6049
tert-methyl amyl ether	mg/Kg	0.0500	0.0540	108	64 - 142	7925
Tertiary butyl alcohol	mg/kg	0.500	0.423	85	36 - 159	3621
Tertiary butyl alcohol	mg/kg	0.500	0.304	61	36 - 159	6049
Tertiary butyl alcohol	mg/kg	0.500	0.388	78	36 - 159	7925
Benzene	mg/kg	0.0500	0.0484	97	76 - 124	3621
Benzene	mg/kg	0.0500	0.0489	98	76 - 124	6049
Benzene	mg/kg	0.0500	0.0561	112	76 - 124	7925
Ethylbenzene	mg/kg	0.0500	0.0528	106	70 - 128	3621
Ethylbenzene	mg/kg	0.0500	0.0475	95	70 - 128	6049
Ethylbenzene	mg/kg	0.0500	0.0567	113	70 - 128	7925
Toluene	mg/kg	0.0500	0.0490	98	72 - 125	3621
Toluene	mg/kg	0.0500	0.0468	94	72 - 125	6049
Toluene	mg/kg	0.0500	0.0552	110	72 - 125	7925
Xylenes (Total)	mg/kg	0.150	0.156	104	71 - 129	3621
Xylenes (Total)	mg/kg	0.150	0.138	92	71 - 129	6049
Xylenes (Total)	mg/kg	0.150	0.163	109	71 - 129	7925
Methyl-t-butyl ether	mg/kg	0.0500	0.0473	95	67 - 138	3621
Methyl-t-butyl ether	mg/kg	0.0500	0.0402	80	67 - 138	6049
Methyl-t-butyl ether	mg/kg	0.0500	0.0509	102	67 - 138	7925
Diisopropyl ether	mg/kg	0.0500	0.0447	89	70 - 131	3621

## PROJECT QUALITY CONTROL DATA

Project Number:

Page: 4

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Diisopropyl ether	mg/kg	0.0500	0.0555	111	70 - 131	6049
Diisopropyl ether	mg/kg	0.0500	0.0470	94	70 - 131	7925
VOA Surr, 1,2-DCAd4	% Rec			115	72 - 125	3621
VOA Surr, 1,2-DCAd4	% Rec			104	72 - 125	6049
VOA Surr, 1,2-DCAd4	% Rec			71	72 - 125	7925
VOA Surr Toluene-d8	% Rec			111	80 - 124	3621
VOA Surr Toluene-d8	% Rec			113	80 - 124	6049
VOA Surr Toluene-d8	% Rec			99	80 - 124	7925
VOA Surr, 4-BFB	% Rec			109	25 - 185	3621
VOA Surr, 4-BFB	% Rec			123	25 - 185	6049
VOA Surr, 4-BFB	% Rec			82	25 - 185	7925
VOA Surr, DBFM	% Rec			106	73 - 124	3621
VOA Surr, DBFM	% Rec			91	73 - 124	6049
VOA Surr, DBFM	% Rec			94	73 - 124	7925

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
***UST PARAMETERS***					
TPH (GRO C4-C12)	< 0.31	mg/kg	1465	5/ 9/05	16:46

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
***UST PARAMETERS***					
UST surr-Trifluorotoluene	80.	% Recovery	1465	5/ 9/05	16:46

## PROJECT QUALITY CONTROL DATA

Project Number:

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### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**					
Ethyl-t-butylether	< 0.0007	mg/kg	3621	5/ 9/05	22:42
Ethyl-t-butylether	< 0.0007	mg/kg	6049	5/12/05	14:27
Ethyl-t-butylether	< 0.0007	mg/kg	7925	5/15/05	11:39
tert-methyl amyl ether	< 0.0008	mg/Kg	3621	5/ 9/05	22:42
tert-methyl amyl ether	< 0.0008	mg/Kg	6049	5/12/05	14:27
tert-methyl amyl ether	< 0.0008	mg/Kg	7925	5/15/05	11:39
Tertiary butyl alcohol	< 0.0114	mg/kg	3621	5/ 9/05	22:42
Tertiary butyl alcohol	< 0.0114	mg/kg	6049	5/12/05	14:27
Tertiary butyl alcohol	< 0.0114	mg/kg	7925	5/15/05	11:39
Benzene	< 0.0008	mg/kg	3621	5/ 9/05	22:42
Benzene	< 0.0008	mg/kg	6049	5/12/05	14:27
Benzene	< 0.0008	mg/kg	7925	5/15/05	11:39
Ethylbenzene	< 0.0005	mg/kg	3621	5/ 9/05	22:42
Ethylbenzene	< 0.0005	mg/kg	6049	5/12/05	14:27
Ethylbenzene	< 0.0005	mg/kg	7925	5/15/05	11:39
Toluene	< 0.0005	mg/kg	3621	5/ 9/05	22:42
Toluene	< 0.0005	mg/kg	6049	5/12/05	14:27
Toluene	< 0.0005	mg/kg	7925	5/15/05	11:39
Xylenes (Total)	< 0.0013	mg/kg	3621	5/ 9/05	22:42
Xylenes (Total)	< 0.0013	mg/kg	6049	5/12/05	14:27
Xylenes (Total)	< 0.0013	mg/kg	7925	5/15/05	11:39
Methyl-t-butyl ether	< 0.0009	mg/kg	3621	5/ 9/05	22:42
Methyl-t-butyl ether	< 0.0009	mg/kg	6049	5/12/05	14:27
Methyl-t-butyl ether	< 0.0009	mg/kg	7925	5/15/05	11:39
Diisopropyl ether	< 0.0008	mg/kg	3621	5/ 9/05	22:42
Diisopropyl ether	< 0.0008	mg/kg	6049	5/12/05	14:27
Diisopropyl ether	< 0.0008	mg/kg	7925	5/15/05	11:39
VOA Surr, 1,2-DCAd4	116.	% Rec	3621	5/ 9/05	22:42
VOA Surr, 1,2-DCAd4	95.	% Rec	6049	5/12/05	14:27
VOA Surr, 1,2-DCAd4	77.	% Rec	7925	5/15/05	11:39
VOA Surr Toluene-d8	105.	% Rec	3621	5/ 9/05	22:42
VOA Surr Toluene-d8	113.	% Rec	6049	5/12/05	14:27
VOA Surr Toluene-d8	94.	% Rec	7925	5/15/05	11:39



**PROJECT QUALITY CONTROL DATA**

**Project Number:**

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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
VOA Surr, 4-BFB	105.	% Rec	3621	5/ 9/05	22:42
VOA Surr, 4-BFB	118.	% Rec	6049	5/12/05	14:27
VOA Surr, 4-BFB	85.	% Rec	7925	5/15/05	11:39
VOA Surr, DBFM	103.	% Rec	3621	5/ 9/05	22:42
VOA Surr, DBFM	87.	% Rec	6049	5/12/05	14:27
VOA Surr, DBFM	92.	% Rec	7925	5/15/05	11:39

# = Value outside Laboratory historical or method prescribed QC limits.

## Nashville Division

### COOLER RECEIPT FORM

BC#



Client Name : HFZ

Cooler Received/Opened On: 5/06/05 Accessioned By: Shawn Gracey

[Signature]  
Log-in Personnel Signature

1. Temperature of Cooler when triaged: 2.0 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
  - a. If yes, how many, and where: 2, Front
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
5. Were custody papers inside cooler?..... YES...NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
8. What kind of packing material used? Bubblewrap    Peanuts    Vermiculite    Foam Insert  
Ziplock Baggies    Paper    Other    None
9. Cooling process: Ice    Ice-pack    Ice (direct contact)    Dry ice    Other    None
10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA  
b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA

If not, record standard ID of preservative used here \_\_\_\_\_

17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:  
8590

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:

Bags labeled, not containers,

# TestAmerica

INCORPORATED

Nashville Division  
2960 Foster Creighton  
Nashville, TN 37204

Phone: 615-726-0177  
Toll Free: 800-765-0980  
Fax: 615-726-3404

415291

ExxonMobil

Consultant Name: Holston Fehr & Assoc Inc  
Address: 143 S. Fugeron St  
City/State/Zip: Ventura CA 93001

ExxonMobil Project Mgr: Tom Shook  
Telephone Number: (805) 652-0219  
Fax No.: (805) 652-0793

Sample Name: (Print) Tom Shook  
Sampler Signature: Tom Shook

Report To: James Anderson  
Invoice To: (ExxonMobil PM unless otherwise indicate)  
Account #: 10166  
PO #: 4505 222951  
Facility ID #: 18-IEBK  
Site Address: 1727 Artesia Blvd  
City, State, Zip: Manhattan Beach CA

Regulatory District (CA) LA County

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix							Analyze For:			
							Ice	HNO <sub>3</sub> (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):				
B-8-20	5-2-05	12:10	8																		8015 TPH C/L/LUFT			
B-8-30	5-2-05	12:20	8																		8260 MTBE/13TEX			
B-8-40	5-2-05	12:30	8																		5 CA Oxygenates			
B-8-50	5-2-05	12:40	8																					
B-8-60	5-2-05	12:50	8																					
B-8-70	5-2-05	1:10	8																					
B-8-80	5-2-05	1:15	8																					
B-8-85	5-2-05	14:20	8																					
B-8-1W	5-2-05	14:30	3																					

Special Instructions:

Relinquished by: Tom Shook Date: 5-4-05 Time: 20:05 Received by: Tom Shook Date: 5/5/05 Time: 16:30

Relinquished by: Tom Shook Date: 5/5/05 Time: 16:30 Received by: FEDER Date: 5/5/05 Time: 16:30

Laboratory Comments:

Temperature Upon Receipt: Y  
Sample Containers Intact? Y  
VOCs Free of Headspace? N



**HOLGUIN,  
FAHAN &  
ASSOCIATES, INC.**

ENVIRONMENTAL MANAGEMENT CONSULTANTS

## **APPENDIX 5.**

### **WASTE MANIFESTS**

# TPS Technologies Soil Recycling

Non-Hazardous Soils

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPS:	Load #:
				25194	

Generator's Name and Billing Address:  <b>WASTE ADMINISTRATION COORDINATOR EXXONMOBIL GR WASTE MGMT GROUP 16852 NORTHCHASE DR. RM 918A HOUSTON, TX 77060</b>	Generator's Phone #:	Generator's US EPA ID No.:
	Person to Contact:	
	FAX#:	Customer Account Number with TPS:

Consultant's Name and Billing Address:  <b>HOLGUIN, FAHAN &amp; ASSOCIATES 143 S. FIGUEROA ST. VENTURA, CA. 93001</b>	Consultant's Phone #:	
	Person to Contact:	
	FAX#:	Customer Account Number with TPS:

Generation Site (Transport from): (name & address)  <b>MOBIL S/S # 18-EBK 1727 ARTESIA BLVD. MANHATTEN BEACH, CA P.O. # 4501511560</b>	Site Phone #:	6TEX Levels
	Person to Contact:	TPH Levels
	FAX#:	AVG. Levels

Designated Facility (Transport to): (name & address)  <b>TPS TECHNOLOGIES 12328 HIBISCUS AVENUE ADELANTO, CA. 92301</b>	Facility Phone #:	Facility Permit Numbers
	Person to Contact:	
	FAX#:	

Transporter Name and Mailing Address:  <b>P&amp;C INDUSTRIAL OUTSOURCING GROUP 1681 E. 32ND STREET LONG BEACH, CA 90806</b>	Transporter's Phone #:	Transporter's US EPA ID No.:
	Person to Contact:	Transporter's DOT No.:
	FAX#:	Customer Account Number with TPS:

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input checked="" type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	20	20 Soil Sampling 10	10,440lb		
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>			20760	19240	11520
					173112		5.76

List any exception to items listed above:

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Signature and date: JEANNE DUNCAN ON BEHALF OF EXXON MOBIL 15 16 04

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Signature and date: Chas Sanders 05 13 05

Discrepancy:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Signature and date: JOE PROVANSAL / DELLENA JEFFERY 6-15-05



59 No. 080414

## NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME WASTE ADMINISTRATION COORDINATOR MOBILE S/S # 12.58K P.O. # N/A  
ADDRESS EXXONMOBIL CR WASTE MGMT GROUP 1727 ARTESIA BLVD. EPA I.D. NO. N/A  
CITY, STATE, ZIP 16825 NORTHCHASE DR. RM 919A MANHATTEN BEACH, CA PHONE NO. 261 654-8478  
HOUSTON, TX 77060  
CONTAINERS: No. \_\_\_\_\_ VOLUME 3500 WEIGHT 55

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCKS ☒ DRUMS ☐ CARTONS ☐ OTHER \_\_\_\_\_

WASTE DESCRIPTION GROUNDWATER GENERATING PROCESS \_\_\_\_\_

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>WATER</u>		<u>99-100%</u>	5. _____		
2. <u>T.P.H.</u>		<u>0-1%</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_ ☒ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: NOBRIQA / HFA Wear proper personal protective gear when handling material.

THIS GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

ON BEHALF OF EXXONMOBIL  
JEANNINE DUNCAN  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE 5-6-05

TRANSPORTER

NAME PHILIP WEST INDUSTRIAL SERVICES CORP., INC. EPA I.D. NO. CAR000148837  
ADDRESS 1661 E 32ND STREET JOB NO. \_\_\_\_\_  
CITY, STATE, ZIP LONG BEACH, CA 90806 PICK UP DATE \_\_\_\_\_  
PHONE NO. (562) 997-6080  
Clifton Sanders Clifton Sanders  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE \_\_\_\_\_  
TRUCK, UNIT, I.D. NO. \_\_\_\_\_

TSD FACILITY

NAME CROSBY & OVERTON EPA I.D. NO. CAD028409019  
ADDRESS 1630 WEST 17TH STREET DISPOSAL METHOD ☐ LANDFILL ☒ OTHER 15  
CITY, STATE, ZIP LONG BEACH, CA 90813 Profile # 12620  
PHONE NO. (562) 432-5445  
Theresa... 6-15-05  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE \_\_\_\_\_

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/Q		RTCD	HWDF	NONE

DISCREPANCY \_\_\_\_\_

TRANSPORTER 1